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Oil, Paint and Drug Reporter

VOL. LV. No. 25. NEW YORK, MONDAY, JUNE 19, 1899. FOR RATES SEE PAGE 5.

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NEW YORK, JUNE 19, 1899.

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THE BULGARIAN ROSE CROP.

Referring to our editorial remarks in the issue of the "Reporter" for June 5 last, wherein we called special attention to the telegraphic and mail communications which we had received from Southeastern Europe, with reference to the prevailing atmospheric situation in the rose-growing districts throughout the whole of Rumelia, it seems appropriate to comment upon the fact that the information furnished us by our correspondents was unbiased and impartial, and has been borne out by later advices emanating from a different source. In the communications referred to above, it was in substance stated that the weather that was then and that had been for several weeks prevalent in the districts where the rose bushes abound, was decidedly unfavorable for a large distillation of otto of rose this year.

The mail advices from Kazanlik, published in our news columns in our last issue, showed that the situation had been in no wise exaggerated, and that grave anxiety had been and was being felt on May 23 as to the outcome, the dry weather having caused the roses to bloom more quickly than was expected, and the absence of moisture preventing the flowers from yielding the usual amount of ethereal oil.

Happily, however, the much desired and long withheld rain was forthcoming a day or two after our correspondent penned his letter, and the news of the welcome and opportune change in the weather was first received by an enterprising essential oil house here, and given due publicity along with the earlier communications received by us direct.

No anxiety need now be felt in regard to this year's outturn of otto of rose. The production will be fully equal to, even though it does not exceed, that of last year, which was by no means small. Permanent damage to this year's crop of roses, and the consequent curtailment of the distillation of oil, would have had the effect of advancing the price of this already comparatively expensive article; but the change in the prospects dispels the probability of an increase in values, and leads us to believe that, if prices are revised at all this season, it will be in favor of the buyer and consumer.

DISSATISFACTION AMONG CALCUTTA SHELLAC SHIPPERS.

The news from Calcutta, which we print elsewhere in this issue of the Reporter, may or may not be of the gravity that might reasonably be deduced from a perusal of the articles, but it nevertheless deals with a matter in which not only the importers of shellac are interested, but which should also engage and enwrap the attention of the consuming trade, as it pertains to what might be a most flagitious attempt to secure a monopoly of the output of shellac at the fountain head of supply, or to at least place a certain firm—already an admittedly powerful factor in the general situation—in the position of practical dictatorship of all that pertains to the trade in Calcutta and the producing sections, and consequently to a greater or less degree in the London and New York markets. On the other hand, the situation may be the natural result of perfectly business-like and legitimate methods pursued by a house which has the advantage of practically unlimited capital and resources.

We print the articles for what they are worth, as a matter of news of interest, with the comment that, if the tactics referred to are in reality resorted to as asserted—and there seems to be more than a mere possibility that they are—such procedure is a gross transgression of even a most loose code of business ethics, and is certainly beneath the dignity of any self-respecting commercial house.

ESTABLISHED EFFICACY OF DRUGS.

The purpose of the United States Pharmacopoeia is properly to keep in touch with the approved discoveries of the scientific men who are working along chemical and physiological lines of research in the investigation of new remedies for the amelioration of the conditions of disease. For that reason, the Pharmacopoeia is subjected to revision every ten years. The next revision will be made by a convention which will meet at Washington next May, said convention consisting of delegates from the several incorporated State and national medical and pharmaceutical associations, incorporated colleges of medicine and pharmacy, the army, navy and marine hospital service, and other organizations which have been recognized as being entitled to a voice in such matters.

The potency of drugs viewed as remedial agents has already been recognized as properly within the purview of such a convention. For thirty years or more official standards have existed for some drugs. Precedents being thus long established, a basis exists for the consideration of like matters at the next convention. Neither in logic nor in practice is there any reason why the convention can neglect to apply the same sanction to the standardization of belladonna, calabar, colchicum, conium, gelsemium, hyoscyanus, ipecac, podophyllum, stramonium, and veratrum. Because of their utility and their toxicity, there is not one of these that should be debarred from a place in exactly the same category as opium. Conservative as it is the British Pharmacopoeia has recognized this need of standardization, and in 1898 added ipecac and belladonna to the list of drugs already standardized in the United States Pharmacopoeia.

There can be no hesitation in admitting and accepting the propriety of establishing a standard of potency for the drugs above mentioned. But, on the other hand, it may be argued that the principle should be susceptible of universal application before it should be admitted to the Pharmacopoeia. Those who take the latter view will demur that such drugs as cannabis indica, aconite, strophanthus, digitalis and ergot are beyond the reach of any such system, and it is quite true that, up to the present, chemistry is devoid of any reliable means of standardizing these drugs as to the medical potency of any given sample. Yet not on that account is the subject rendered hopeless. Where chemistry fails, recourse may properly be had to pharmacology, with the assistance of biology.

This is no longer a theory, for, within the decennium which has nearly elapsed since the last revision of the Pharmacopoeia, the principle has been practically demonstrated. All that remains for next year's convention to do is to accept the work already done and to give it the official sanction which it deserves. Physiological assay of drugs, in which chemical assay is barred, has been practiced for several years by many reputable pharmaceutical manufacturers. In its essence it amounts to a standardization of such drugs as are not amenable to the chemical tests already recognized by the last Pharmacopoeia. The method is simple, the results conclusive. A certain standard preparation of each drug is tested on living animals. This test affords a determination of the minimum amount which constitutes a fatal dose to a given weight of animal tissue in life. Other animals under exactly similar conditions (and in some of the laboratories the experiments are mostly conducted on frogs) receive graduated doses of the preparation under investigation. The results disclose the amount of the fatal dose as compared with the standard; in other words, it is a physiological assay. That has been practiced with such success as to develop a working formula. It has received the recognition and approval of high medical authority. At a recent meeting of the American Medical Association at Columbus, Ohio, a prominent Chicago doctor took the occasion to say: "I believe there are no better drugs than the standardized drugs; and those pharmaceutical manufacturers who have spent time and money in this connection are deserving of credit for their successful efforts to standardize drugs unamenable to chemical determination by their physiological test or assay on the living animal." This is not an isolated instance. The association, in appointing the five members of its delegation to the Revision Committee, instructed them on this point to give full weight to that which has already been done in the line of the physiological test, and to grant an official recognition in the new edition of the Pharmacopoeia.

This is a subject of the most far-reaching importance. How it concerns the physician, the dispensing druggist and the patient dependent on both, is superficially manifest. A little reflection will show that its effect reaches to the uttermost corners of the earth, in fact to every remotest spot where men are collecting the raw material which becomes the crude drug of commerce before it can enter into the preparation of the various remedies. We learn from a prominent manufacturing house that recently, within a single week, they rejected no less than a ton and a half of ergot because it failed to come up to standard as established by physiological assay, and that last year the amount of cannabis indica discarded for the same reason was no less than 30,000 pounds. This showing is indicative of the importance of the taking of such steps by the Committee on Revision of the Pharmacopoeia as will recognize the important work already accomplished.

THE POSITION OF VARNISH GUMS.

Since our last editorial review of the situation in varnish gums the market has presented few new features, but a resume of the conditions which have prevailed for the past few months may be interesting. Taking the market day by day, there has been very little activity apparent, but when the aggregate amount of business is considered, it can readily be seen that there has been an improvement in this line of trade as noted in other lines closely related. Varnish manufacturers report a steady demand for all grades of varnish and the outlook is for a continued good consumption throughout the Summer months. The exports of varnish from the United States amount to considerable, and are increasing year by year, as can be seen by reference to the following table:

TOTAL EXPORTS OF VARNISH TO ALL COUNTRIES FOR THE FISCAL YEARS ENDING JUNE 30.

Years.	Gallons.	Dollars.
1891	153,365	203,285
1892	215,266	293,059
1893	210,067	258,409
1894	226,760	282,278
1895	256,890	303,959
1896	335,979	362,975
1897	409,569	431,761
1898	398,841	422,693
1899 (ten months)	357,506	377,353

The rumored combination of varnish manufacturers had very little effect on operations in the varnish gum market. The larger manufacturers have gone right ahead, irrespective of combination schemes, and contracted for supplies for the balance of this year, and, in some instances, for the first part of 1900. A few of the smaller manufacturers, however, have failed to anticipate their probable future requirements, and this fact has some influence on prices for spot goods. During the period under review the spot offerings of gums have been limited, and the greater part of the operations have been in goods on the way or to load. The primary markets have ruled high, and in some instances have been relatively higher than the New York market. In the principal European markets the demand for all gums has been much larger than the average for preceding years, and prices have ruled firm. All things being considered, the outlook for some time to come is for a steady market with advances possible in some lines. A further proof of the large and increasing consumption of varnish gums may be found in the following table, compiled from Government figures, which shows the total imports of copal, kauri and damar during the fiscal years ending June 30:

Year.	Pounds.	Dollars.
1891	15,245,524	1,037,677
1892	18,140,231	1,778,367
1893	19,728,561	2,270,071
1894	13,103,295	1,397,555
1895	16,940,576	1,605,310
1896	18,686,977	2,012,452
1897	13,708,915	1,545,155
1898	17,071,403	1,779,138
1899 (ten months)	15,721,620	1,541,434

Of all the gums, kauri has shown the most activity. Prices have become firmer, and for some grades have been advanced. The spot supplies in dealers' hands have at all times been limited, which has kept spot quotations strong. The demand, however, has been small for immediate delivery, as consumers keep themselves supplied for some time ahead. The principal sales have been on contracts for delivery during each month for the balance of this year, and, in many instances, on into next year. Practically all the arrivals have gone immediately to consumers, and it is believed that the cargo of the Star of the East, which is now about due, will be taken up in the same way. After this cargo there is none due to arrive for about three months, and dealers expect during this interval, if not before, advances in quotations will be made. Auckland is reported firm with an advancing tendency. Stocks at that point, while fairly large, consist principally of low grades which do not find a market in this country.

The position of Manila copal has also been improved during the past few months. The requirements of the domestic trade are fully as large as the average for preceding years, and, since the close of the war with Spain, the exports to Cuba of the lower grades of varnish have largely increased, and this has caused an increased consumption of Manila copal, which is largely used in the manufacture of this grade of varnish. The Manila and London markets have ruled high, and, because of the large stocks in this market, have at times been relatively higher than has the local market. At the present time the stocks in this market are believed to be fairly heavy, but dealers control the larger part, and the offerings are therefore somewhat limited. As stated above, kauri is firm with an advancing tendency; this has a strengthening influence on Manila copal, and dealers have become much firmer in their views.

The other gums have not shown as much activity as those previously mentioned, but, in all cases, the outlook is encouraging, and it is the general

opinion that prices will be well maintained for some time to come. Supplies of Zanzibar copal are very limited. There is a good demand for this gum for the special purposes for which it is used, and holders have become very firm in their views and refuse to shade the present quotations. The greatest scarcity is to be noted for bean and pea, although the higher grades are also in exceptionally light supply. There has been a good steady demand for Batavia damar, which has considerably depleted the spot supplies, particularly as importers have refrained from free purchases abroad because of the high prices which have ruled in Batavia. The good demand in the continental markets, particularly at Amsterdam, is ascribed as the reason for the firm position of the primary market. Within the past week, however, the Batavia market has become slightly easier, but without an actual decline. Importers in this market have taken this opportunity to order replenishment of their stocks, and at the present time there is an active market of shipments.

MAY PETROLEUM STATISTICS.

The reports of the several pipe lines, showing the receipts and deliveries of crude petroleum during the month of May and the stocks in their possession at the close of the month, do not show any important change in the statistical situation, although there is shown to be a decrease of nearly 200,000 barrels in stocks above ground. The increase in production was less than 250,000 barrels, and the increase in deliveries was over 285,000 barrels. That an increase in both production and deliveries would be shown was expected. The new production, as indicated by the monthly report of field operations, did not warrant so large an increase, but it is probable that the older wells have kept up their production better than heretofore, and many having been drilled deeper have increased their output. The increase in deliveries was due to the improvement in the export demand, which had languished during the past six months. While the reduction in stocks may be regarded as a bullish feature, it was not of sufficient extent to exert an important effect, and, taken in connection with the increase of production, is of very little importance, especially as field operations are now being prosecuted with unusual vigor and the prospects are favorable for a still larger increase during the current and ensuing months. It is not probable, therefore, even though the requirements for export and home consumption continue at the same extent as during May, or even show further improvement as the season advances, that stocks will decrease at a rate which will influence a material advance in prices. It has been clearly shown during the past year that the export demand is influenced by the price demanded for the various products, and, should the price of refined be advanced in consequence of a further reduction in stocks, it would cause a falling off in our exports and then the stocks would again increase. Present indications do not warrant the expectation of an early radical change in the statistical situation, and consequently no important change in market values of the product.

The production in the States of New York, Pennsylvania, West Virginia, Ohio and Indiana during the month of May, as represented by pipe line receipts, was 4,265,291 barrels, showing an increase of 247,945 barrels, as compared with the production during April. Of the total 2,765,791 barrels was of the Pennsylvania grade and 1,499,500 barrels of "Lima" oil. The former showed an increase of 147,542 barrels and the latter of 100,403 barrels. The deliveries during May reached a total of 4,460,819 barrels, showing an increase of 285,523 barrels. Of this amount 2,578,579 barrels was Pennsylvania oil and 1,882,240 barrels was Ohio oil. The increase in deliveries of Pennsylvania oil was 201,093 barrels and in Ohio oil 84,430 barrels. The total stocks at the close of the month amounted to 25,573,832 barrels, showing a shrinkage during the month of 198,523 barrels. The stocks were made up of 12,234,674 barrels Pennsylvania oil and 13,339,158 barrels Ohio oil. The stock of Pennsylvania oil showed an increase of 187,230 barrels and the stock of Ohio oil a decrease of 385,753 barrels.

TRADE ITEMS.

[For other Trade Items see contents on page 21.]

A receiver has been asked for the Henrietta Window Glass Company, of Baltimore, Md.

Buyers who may be in want of citric acid should communicate with Parsons & Pettit of this city.

W. J. Matheson has entered judgment in the sum of $271.47 against Arthur H. and Florence L. Seaver.

The Standard Plate Glass Company, at Butler, Pa., will add a thin plate department to their plant.

Judgment in the sum of $109.92 has been secured by the Hotopp Varnish Co. against Babette Blumenthal.

Supplies of paints, oils, chemicals, etc., are required for the Rock Island Arsenal, Rock Island, Ill. Bids to supply the same will be opened July 7.

On Thursday last Morris Herrmann and wife sailed for Hamburg by the Augusta Victoria to spend a couple of months traveling in Germany and France.

F. G. Fisher, the nitrate of soda king, of W. R. Grace & Co. of this city, left on Saturday for an extended foreign trip in which he will combine business as well as pleasure.

On Monday last S. V. V. Huntington, treasurer and manager for Edward Smith & Co., left New York for Chicago and the West, to be gone for about a three weeks' business trip.

Among the out-of-town directors in attendance at the meeting of the National Lead Co. at their regular meeting on Thursday last were Messrs. Geo. O. Carpenter, E. F. Beale, A. P. Thompson and F. W. Rockwell.

Mr. Max B. Kaesche of the firm of F. Bredt & Co., will sail on Wednesday on the New York for Southampton. Mr. Kaesche will be abroad for about two months, and will combine pleasure and business during his stay.

Proposals to supply the Columbia Arsenal, at Columbia, Tenn., a quantity of lime, cement, glass, paints, oils, etc., are solicited. Bids will be opened July 10. The same articles are also required for Fortress Monroe, bids to be opened July 6.

The plant and stock of N. Ohlandt & Co., manufacturers of charcoal, neatsfoot oil and fertilizers, at San Francisco, was totally destroyed by fire on the 6th inst. The loss is estimated to be $8,000, which is partially covered by insurance.

Lewis Berger & Sons, Ltd., are not only making a full line of dry colors, but also offer paris green, which is pure and cheap, put up in all size packages, and is the Government standard. Our readers would do well to consult this reliable house when buying.

The Buckeye Paint and Varnish Co., Toledo, O., announces an advance of ten cents per gallon on their ready mixed paints, to take effect July 1. This is made necessary by the increase in price on all raw material entering into the manufacture of mixed paint.

T. J. Pinkard of Opelika, and D. Vernon of Atlanta, Ga., have purchased ten acres of land in East Birmingham, and will at once commence the erection of a $50,000 cottonseed oil mill. The mill will be in operation by the coming fall, and will be the second one at East Birmingham.

Cunningham & Co., ltd., of Pittsburgh, Pa., propose to build a 36-blower window glass tank for next fire, in addition to the 10-pot furnace operated heretofore. The cutting and flattening departments of the factory will be correspondingly enlarged, and work is to begin on the addition at once.

Texas cotton oil mills who may desire a reliable party to handle their products, will find it to their interest to communicate with Mr. James M. Adams of this city, who has every facility for handling their products. For further information, see his card, which appears on another page of this issue.

It is reported from Chicago that a committee of eminent business men will be asked to examine the books of the American Linseed Company in behalf of stockholders and make a report as to its fiscal condition. This report, it is added, "will be absolutely impartial and will be given to the public with the full sanction of the company."

Valuable patents covering the manufacture of chemicals will be sold by auction at the New York Real Estate Salesrooms, at 111 Broadway, on Wednesday, June 28. The patents are described in an advertisement to be found on page 21 of this issue. This sale was erroneously advertised to take place on "Wednesday, June 18."

A decision of interest has been rendered in the United States Circuit Court by Judge Morrow when the California Fig Syrup Company won its case against C. E. Worden & Co. Suit was brought by the Fig Syrup Company to restrain the defendants from manufacturing and selling a certain laxative medicine under the name of syrup of figs or fig syrup. The decision upholds the plaintiff and enjoins the defendant from using the name objected to by the plaintiff.

On June 7 fire destroyed a large part of the stock of the Davenport & Phinizy Company, wholesale druggists and jobbers, of Augusta, Ga. The damage done is estimated at $25,000, which is practically covered by insurance. J. B. Davenport, senior member of the firm, has been in this city and Philadelphia during the past week making arrangements to replenish the stock. Wholesale paint and drug houses are invited to send catalogues and price lists to the home office of the firm.

The Merchants' Association, of New York has issued a booklet entitled "Summer Days and Nights in New York," which is intended for those who contemplate visiting the city during the summer; but even the resident will find it of use. It is profusely and beautifully illustrated by artistic engravings from original photographs, whose accuracy any old New Yorker can vouch for. It also contains an excellent map of the city and suburbs, on which the various transportation lines are indicated.

As the gay and festive potato bug has made his annual visit to the farming sections of our country, it behooves consumers of paris green to lay in a stock and prepare a feast for his royal bugship. In order that they may not be misled by the "so-called greens" which are on the market, we direct their attention to the card of C. M. Childs & Co., of this city, which appears on another page of this issue. The mere mention of their name is a sufficient guarantee of the goods which they make. They have also stock on hand ready for prompt delivery, which is another important item.

The Secretary of State of Texas has begun to draw the line on corporations seeking to do business in Texas under foreign charters. Acting upon the advice of the Attorney General, he refused to file the articles of incorporation of an association which went to New Jersey for a charter to engage in the business of furnishing public facilities to the citizens of Sherman, and in doing this established a precedent that will be followed by his department. The Attorney General is of the opinion that no corporation which goes outside of the State for a charter should be admitted to the State.

The incorpration of the W. R. Grace Co. with a capital stock of $6,000,000, to do a banking business here and in South America, was announced last week. The W. R. Grace Co. does a large banking business in South America. It is thought that the incorporation of the company was brought about for the purpose of facilitating its large foreign commercial transactions. The firm has been aggressive since its organization, and the opening of new branches abroad will be in line with the policy it has pursued heretofore. The old firm of W. R. Grace Co. ha da capital of $3,000,000. It was organized nearly 35 years ago. It has branches in London, San Francisco and the principal cities in South America.

The Petroleum Industrial and Technical Review is the name of a journal published in London and purports to give its readers the latest information relating to the petroleum industry from all the producing countries. It is a weekly publication, each alternate week sending out only four pages of 9x13 inches. One half—just two pages—of the issue of June 3, is taken bodily from the Oil, Paint and Drug Reporter of May 22. They evidently know a good thing when they see it, but the readers are being imposed upon, as the charge is one shilling per copy, when, by paying $6 per year for the Reporter they would get the same information a fortnight earlier and have the assurance that the reports were original and compiled for them—not stolen.

Six thousand acres of phosphate land, comprising the control of the lands not yet mined in South Carolina, were sold recently to Boston parties, supposed to be the representatives of the Bradley fertilizer people. This transaction is said to be the largest ever made in this industry in this country. As a result, Charleston and the immediate vicinity expect a great impetus to trade in fertilizers as well as phosphates.

The British consul at Tripoli makes the following report on the sponge trade of his district: "During the previous year, owing to the war between Greece and Turkey, all the sponges which had been collected here could not be disposed of, so that in addition to large quantities secured during a successful fishing season in 1898, there was a stock on hand from the previous year. Sixty per cent. were dispatched to Greece and the remainder to France, Austria, and Great Britain, those to the United Kingdom being altogether insignificant. Prices rule high."

The Vera Chemical Company of Milwaukee, Wis., is now placing chemically pure sal soda and glauber salt on the market, as also sodium carbonate in any quantities desired, put up in fine granulated form, as fine as granulated salt, insuring easier solution and keeps better than in lump form. This company is incorporated under the laws of Wisconsin, and commenced active manufacturing last August. The plant is fitted with the most improved modern machinery and they have exceptional shipping facilities by railroad and water. The products are manufactured by a new process by which all impurities are precipitated.

The progressive firm of Parke, Davis & Co. is ever mindful of the comfort and welfare of its employes. Recently a "bicycle annex" has been equipped at the works in Detroit for their exclusive use, and over 400 are cared for daily, the large area, with its swarm of wheels, being an eloquent, though silent, evidence of the magnitude of this concern, as well as of its care for the well being of its employes, and offers an interesting sight to the many from all parts of the country who visit this imposing establishment. The "bicycle annex" is in care of a trusty caretaker. No fee is asked for storing the wheels, and for 25c. per month each bicycle is cleaned and oiled.

PETROLEUM NOTES.

At Mars No. 3 Bassnecker has been completed, and is good for 10 barrels a day.

On Piney fork, Witzel county, No. 7, James Booth has been drilled into the Gordon and made 20 barrels the ensuing 24 hours.

On the W. P. Smith farm McGranahan & Co. have completed their No. 3 and have a 10-barrel producer from the Big Injun formation.

On Laurel run, Murphy district, the Alleghany Oil Company has drilled in its test well on the Gamble estate and has a good gas producer in the salt sand.

The Associated Producers have drilled in etheir No. 7 on the S. M. Bumgartner farm on Whisky run, Ritchie county, and have a producer good for 60 barrels a day.

In the Big Injun sand development, in Wetzel county, the South Penn Oil Company has completed its No. 27 on the I. D. Morgan farm and has a 15-barrel pumper.

The cost of pipe at the present price to drill and equip a Gordon sand well in West Virginia runs up to $6,690. This, of course, includes the tubing required to put it to pumping.

The Ohio Oil Company has completed its No. 67 well on the D. J. Corey farm, located in section 14, Liberty township, Wood county, O. The first 24 hours' production after shot was 30 barrels.

The Ohio Oil Company has completed its No. 6 well on the J. B. Severns farm, located in section 16, Perry township, Allen county, O. The first 24 hours' production after shot was 55 barrels.

Squire & Jay have completed their No. 14 well on the J. C. Davis farm, located in section 34, Liberty township, Wood county, O. The first 24 hours' production after shot was 40 barrels.

One mile southwest of the Jarvisville pool, in Harrison county, the South Penn Oil Company has completed a test well on the A. D. Lawson farm and has an average producer for that territory. It will be good for 20 barrels a day.

Cochran & Co. have completed their No. 1 well on the J. J. Driver farm, located in section 7, Jackson township, Allen county, O. The first 24 hours' production after shot was 30 barrels.

The Ohio Oil Company has completed its No. 16 well on the J. R. Arter farm, located in section 35, Liberty township, Wood county, O. The first 24 hours' production after shot was 100 barrels.

Goodkind & Co. have completed their No. 4 well on the Wrockledge farm, located in section 12, Marion township, Allen county, O. The first 24 hours' production after shot was 50 barrels.

The Ohio Oil Company has completed its No. 18 well on the J. R. Arter farm, located in section 35, Liberty township, Wood county, O. The first 24 hours' production after shot was 100 barrels.

L. D. Langmade has completed his No. 2 well on the E. B. Leverton farm, located in section 33, Plain township, Wood county, O. The first 24 hours' production after shot was 150 barrels.

The Ohio Oil Company has completed its No. 7 well on the J. B. Severns farm, located in section 5, Perry township, Allen county, O. The first 24 hours' production after shot was 60 barrels.

Sinclair, Morrison & Co. have completed their No. 5 well on the A. Hall farm, located in section 18, Jackson township, Allen county, O. The first 24 hours' production after shot was 30 barrels.

Davis, Geiger & Co. have completed their No. 4 well on the Weisenmeyer farm, located in section 19, Shawnee township, Allen county, O. The first 24 hours' production after shot was 75 barrels.

The Palmer Oil Company has completed its No. 8 well on the Charles Palmer farm, located in section 21, Portage township, Wood county, O. The first 24 hours' production after shot was 30 berrels.

The Deka Oil Company has completed its No. 3 well on the Daniel Shaffer farm, located in section 29, Shawnee township, Allen county, O. The first 24 hours' production after shot was 75 barrels.

The Shawnee Oil Company has completed its No. 7 well on the T. J. Graham farm, located in section 29, Shawnee township, Allen county, O. The first 24 hours' production after shot was 45 barrels.

The oil industry of the State of California is growing at a rapid pace. The present output of the Coalinga oil wells is about fifteen carloads a day. New wells are being sunk as fast as men and machinery can do the work.

On the west side of the Clarion development in Clarion county F. G. Ketley & Co. have drilled in a 15-barrel well on the Corbitt & Wilson heirs farm. It is thought to show an extension to the old development.

On the east side of the Flat Run development in Monongalia county the South Penn Oil Company has drilled in its No. 2 on the Esther Sutton farm, and has a producer that started at 10 barrels an hour from the first pay.

At Sistersville, W. Va., Joseph P. Sweeney, for the past seven years purchasing agent for the Seep Purchasing Agency at that place, has resigned to accept the position of cashier in the First National bank at that place.

King & Co.'s No. 2 well on the Dimond farm, in the new development, in German township, two miles north of Lima, O., has been drilled in and shot and is showing for by far the best well yet struck, being estimated at from 100 to 150 barrels on the start.

In the Hendershot pool, in Wood county, the same company has completed its test on the William Hendershot farm and has a duster. The same company's No. 3 on the J. G. Walker farm in the Murphytown district has been completed and will make a 20-barrel producer.

In the Bristoria development, in Greene county, No. 1 Philip Woods has made one good flow and is drilling to the second pay. In the same development No. 1 N. H. Johnson has been drilled a few feet into the sand and has a show of oil. It is expected to improve with deeper drilling.

The Forest Oil Company met with a surprise at its No. 1 on the Crooks farm at Cooperstown, Butler. It was an old third sander, drilled down to the fourth sand, and will make a 15-barrel producer from the lower formation. The same company's Nos. 10 and 11 Barclay in the same district have been drilled in, and are showing for 10 barrels each.

Notwithstanding there is still much work going on inside of the defined limits of the Scio field, the size of the new wells is not of sufficient volume to maintain the production of the field at the highest point it had reached a month ago. The present daily production of the field is 6,000 barrels a day.

The enormous advance in iron pipe since the formation of the combine is paralyzing the business of oil development and the talent are complaining bitterly. The figures have advanced about 150 per cent. in the past six or eight months. When wells now drilling are completed, many owners will shut down.

At Venice the Forest Oil Company has completed its No. 5 on the S. H. White farm and has a 10 barrel pumper from the Gordon stray. At Economy McCarthy & Co. have completed their No. 9 on the Economy tract and have a duster. The well is located on the north bank of the Big Sewickley creek at Fair Oaks.

The Carter Oil Company is the most active developer of shallow sand territory near Hebron, Tyler county. It has a half-dozen strings of tools running and has just made the location of its thirty-ninth well on the big Broadwater farm. No. 36 on this farm was completed last week and is producing 50 barrels a day.

A few months ago a farm belonging to Sarah E. Eddy, near Morgantown, W. Va., was taken up by the Battelle Oil Company and others to be worked. It was considered rank wildcat territory, but small working interests were sold and drilling commenced. The farm is now producing over 2,000 barrels of oil daily, with the result that $100 investments are bringing in a nice income.

An English Consular report on the trade of Japan makes this reference to the importation of petroleum: "With an increase of 6,847,238 gallons in quantity, kerosene oil showed a decrease of £27,605 in value. This is due to the supply from the United States of America, from which country most of the oil came as usual, being obtained at lower prices. The importation from Russian Asia slightly declined, while Dutch India furnished 3,735,720 gallons."

On Dutchman run the Sill Oil Company has drilled in its well on the J. B. Lemons farm and has a 2-barrel producer. In Murphy district the Southern Oil Company has drilled its No. 3 on the C. Campbell farm, on McFarland creek, and got a good gas pressure, but no oil. The same company's No. 2 J. Fox, in the same locality, has been completed and is a duster. On Addison run, Grant district, the Expansion Oil and Gas Company has completed its No. 2 on the Headley farm and has a duster. A. C. Hawkins had the same kind of luck at his No. 12 on the McGregor estate, on Big run.

The territory at the headwaters of the Hughes river in Doddridge county, West Virginia, has been watched with a good deal of interest since the Carter Oil Company drilled in its test well on the S. W. Stout farm, about three months ago, and got a good producer. Last month the same company completed a second well on the Stout farm, and got a 30-barrel producer. Mr. Murphy & Co. then concluded to drill a test on the W. B. Maxwell farm. The location of this well is three-fourths of a mile west of the producers on the Stout farm, and has just drilled through the Gordon and found nothing in that formation. This well coming in a duster makes it look discouraging for a probable extension to the west side of developments.

Since McDermott & Co. drilled in their well on the S. E. Eddy farm on the west side of the northeast extension of the deep sand development on Campbell's run, Monongalia county, W. Va., last winter, there has been a good deal of interest centered in the territory in that vicinity. Up to within a very few months the South Penn Oil Company and McDermott & Co. have been the most active developers of the territory. The success these two companies had was an inducement for others to try their luck, and their wells are now coming in; the only result is to condemn the territory to the north and northeast of the producing wells. Greenlee & Forst have completed their No. 1 on the James Cross farm and have a duster. The location is one-half mile north of the Eddy farm. On the Lewis Fox farm, three-quarters of a mile north of the Eddy farm, Houston, McDermott & Co. have completed a duster. One-quarter of a mile north of the Lewis Fox duster Greenlee & Forst have completed a duster on a part of the same farm.

While at Titusville Mr. Isherwood purchased from the National Oil Company, of which the Hon. John Fertig is the guiding spirit, 1,700 acres of leases which that company holds in the vicinity of St. Marys, W. Va. On these leases there are 62 wells, with a production of more than 1,000 barrels per day. The leases embrace about 14 farms, with room on them for about 50 more defined locations for wells. The consideration is something which neither of the parties in interest will divulge, but it is understood to be in the neighborhood of $500,000.

Contracts are reported to have been closed by the Chicago and Indiana Natural Gas Company, through whose mains gas is piped here from the Indiana fields, for the erection of an immense pumping station at Howell Corner, Grant county, Ind., and the construction of a new 10-inch main into Chicago. The cost of this improvement will reach $1,250,000. It is said that inasmuch as the gas supply is diminishing the improvement is regarded as showing an amalgamation of interests with the Manhattan Oil Company, or Cudahy Oil Company. Not less than 4,500 miles of mains and 16 pumping stations are in the Indiana gas fields and by slight alterations the plants devoted to gas may be transformed into fully equipped oil producers.

CORRESPONDENCE.

The Oil, Paint and Drug Reporter assumes no responsibility for statements contained in communications printed under this heading, nor does it by such publication indorse any opinions which a correspondent may express. The Reporter deprecates the use of fictitious names by correspondents, and is of opinion that a communication which the author is unwilling to acknowledge would better remain unwritten.

Miners' Oil.

New York, June 13, 1899.

Editor Oil, Paint and Drug Reporter:

Dear Sir—I have read testimony of Mr. W. H. Clark, of Newark, O., before the Federal Industrial Commission in Washington on the standard oil inquiry which is rather interesting; but in one particular I am of the opinion that he has done the cotton oil industry somewhat of an injustice. I would like to call your attention to this matter, so that if you desire to take the matter up in a separate article, you could correct what might be considered a wrong impression regarding cotton seed oil as a miners' lamp oil.

The testimony was as follows: * * * "Acting under the general instructions of the company's agents, the employes at the Columbus headquarters followed the regular practice of preparing and selling sophisticated and imitation products for the genuine article. 'For example,' said the witness, 'if a party wanted five barrels of miners' lamp oil, which is a pretty fair grade, we mixed two barrels of miners' stock with three barrels of cottonseed oil and sold it as standard miners' lamp." * * *

From the above it would appear that cottonseed oil was the adulterant instead of the adulterated article. But as a matter of fact, winter white cottonseed oil, pure and simple, has been used, to the absolute knowledge of the undersigned, for the past twenty-two years, as a miners' oil, and was considered the acme of perfection for this purpose for years, until the trade found it unprofitable, and finally began to use summer white C. S. oil, mixing same with mineral oil to give it the necessary cold test, and incidentally to reduce the price practically to one-half cost of pure winter pressed oil. Thus it will be seen that two barrels of "miners' stock" mentioned by Mr. Clark was really the adulterant, though it might hardly appear so to the uninitiated from the reading of his testimony.

In the beginning, as I understand it, lard oil was used as a miners' lamp oil, but, with the advent of winter pressed cottonseed oil, the latter was found a superior article, from the fact that it stood a much better cold test than the winter pressed lard oil, while giving an equal light, as well as being practically smokeless.

Then came the use of summer white cottonseed oil, which, in the early days, was some ten cents per gallon cheaper than the winter pressed, but as it would congeal in the barrel in cold weather, the storekeeper would be unable to draw the same through the faucet, from which circumstance arose the necessity (?) of mixing therewith, say, two or five gallons of mineral oil.

This being swallowed, metaphorically speaking, by the consumers, it was only a question of time that the keen competition for the miners' oil trade necessitated additional adulteration, until to-day it is only a question of what price the storekeeper wants to pay for his miners' oil, to enable the compounder to accommodate him, and I assure you I have heard of even a greater amount than two barrels of minerals, which is, I presume, the same as Mr. Clark's "miners' stock," being mixed with cottonseed oil in filling an order for five barrels of miners' lamp oil, as mentioned by Mr. Clark.

No reputable manufacturer or refiner of cottonseed oil, who, as a rule, sells only to jobbers, has ever been guilty, so far as I individually know, of mixing mineral oil, as above stated, with their cottonseed oil, whether or not the same was branded as miners' oil.

Miners' Oil.

MISCELLANEOUS.

Annual Outing of Drug Trade Bowling Association

The annual outing of the Wholesale Drug Trade Bowling Association of New York will be held at Donnelly's Grove, College Point, L. I., on Saturday next, June 24. The steamer "J. G. Emmons" will leave the foot of Beekman street at 1:30 p. m. sharp. Rampone's Celebrated Old Guard Band has been engaged to furnish music during the outing. The principal feature of the afternoon's sport will be a baseball game between two teams made up of the best available material, and the possibilities for entertainment thus afforded will be almost limitless. A thoroughly competent umpire will preside—one who will be disposed and fully able to enforce his decisions on all points; so no disturbance is to be expected to mar the happiness of all.

Artificial Musk Litigation.

In the case of the Society Fabriques de Produits Chimiques de Thann et de Mulhouse vs. George Luederes & Co., the latter have made a motion before Judge Lacombe, in the United States Circuit Court for the Southern District of New York, that that part of the bill of complaint which alleges undervaluations and misleading designations in regard to the importation of artificial musk, be stricken out upon two grounds, viz.: First, that the charge is irrelevant in a patent suit, and, secondly, that it is untrue.

George Luederes & Co. state that they have never had any difficulty with the Custom House authorities about the importation of any product similar to artificial musk, nor have they ever received notice of any complaint brought against them by the same authorities.

Flaxseed Inspection Rules.

The following circular from the flaxseed inspection department of the Chicago Board of Trade will be distributed this week. The Committee on Flaxseed Inspection reported favorably on its publication, and the report June 6 was approved by the president and board of directors. The method of arriving at the percentages of unsound seed is clearly set fort and shows that the inspection has been reduced to a mathematical exactness that defies argument. Mr. Stevens' report is as follows:

To the Flaxseed Trade of Chicago and the West:

The president and directors of the Board of Trade of the city of Chicago, in the exercise of their right, did, on the 14th day of February, 1899, amend the regulations for the inspection of flaxseed, the act to take effect and be in force on and after July 1, 1899.

They appear to provide in clear and positive terms a mode for the legal inspection, registration, storage, sale and shipment of the flaxseed of commerce which comes within the jurisdiction of the board.

That section of the law which declares that all contract seed shall be commercially pure may be considered the cornerstone of the system.

The new principle introduced—that of allotting to each grade its proper percentage of unsound seed, takes its true position as the keystone, uniting and binding the several parts in a systematic whole.

The crown of this union of principles, essential to the proper inspection of flaxseed, is the assignment to each grade the mean weight per measured bushel of clean seed, as pointed out by the wisdom of experience.

The present status of the legal grain inspector is determined by the average correctness of his judgment or opinion as to the proper grades of grain offered for inspection.

In the matter of flaxseed inspection, inventive genius has been equal to the effort to amend the rules so as to eliminate all suggestion of chance in grading where field or other damage is the dominating

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factor. Certainty having superseded opinion, it is possible for the unskilled to do the work and announce the result, without the aid of experts.

There is but little cause for uncertainty in any phase of seed inspection.

Low grade flaxseed is usually damp, musty or unsound from field or harvest damage. The presence of the first two causes of deterioration can be confirmed or denied by the sense of touch or smell. If present the seed is positively of the "rejected" grade. If the seed is too wet to be called damp or too fetid to be called musty, it is positively of the "no grade" grade.

Preliminary to giving the standing of the ever-present harvest or field damaged flaxseed in the economy of inspection, we will show the relative position of the two grades of number one seed, known to the regulations.

The definition of the number one Northwestern grade was framed to cover, as near as may be, the characteristics of the flaxseed grown in the Northwest. The number one grade rules were drawn to provide for the best flaxseed marketed in the Southwest. Yet, in grading, where grown is in nowise considered.

The seed being dry and sweet and otherwise fit, the distinctive qualities of each lot dictates to which number one grade it belongs.

The number one Northwestern grade takes first position in the rules, and, the seed so classed, is preferred by the crushers. The number one is compensated by being the contract grade of commerce, and at times commanding the better prices.

The definition of the number one Northwestern grade of flaxseed was amended by striking out the figure 8 and inserting the figures 12½. Therefore, that grade may carry intermixed 12½ per cent. of damaged seed. The commercially pure seed of this grade shall weigh not less than fifty-one pounds to the measured bushel.

The number one flaxseed grade, as previously defined, was amended my striking out the figure 20 and inserting the figures 25. For this reason the number one grade may carry intermixed 25 per cent. of unsound seed. The weight per measured bushel of cleaned seed must not be less than fifty pounds.

To secure a final decision as to the grade of a sample of flaxseed, the same being commercially pure and the grade decided otherwise than as to the quantity of damaged seed intermixed, the operator weighs out an average ounce and proceeds by hand to separate the ingredients consisting of sound and unsound seed and impurity. To determine the per cent. he will weigh up each part separately.

Either the troy or avoirdupois system of scales can be used, the grain or drachm to take the unit place respectively.

A few examples will be given to enable the novice to master the art of the system of percentage as applied in the execution of the rules. The necessary variations will readily be comprehended.

Should the unsound seed of the analyzed sample be the maximum quantity known to the number one Northwestern grade, the troy scale would real thus—sixty grains (⅛ oz.), equivalent to 12½ per cent. The sound seed should weigh 420 grains (⅞ oz.), equivalent to 87½ per cent.

The two parts, with a trace of impurity, must weigh 480 grains (1 oz.). The two make a total of 100 per cent.

Should the unsound seed of the sample be the maximum quantity known to the number one grade, the troy scales would read 120 grains (¼ oz.), equivalent to 25 per cent. The sound seed should weigh 360 grains (¾ oz.). The two parts equal 1 oz., or 100 per cent.

In case the avoirdupois scale is used, and should the unsound seed to be weighed be the maximum quantity known to the number one Northwestern grade, the scale would read 2 drachms (⅛ oz.), equivalent to 12½ per cent. The sound seed should weigh 14 drachms (⅞ oz.), equivalent to 87½ per cent.

Should the unsound seed of the sample be the maximum quantity known to the number one grade, the scale would read thus—4 drachms (¼ oz.), equivalent to 25 per cent. The sound seed should weigh 12 drachms (¾ oz.), equivalent to 75 per cent. The two parts equal 16 drachms (1 oz.), or 100 per cent.

If a half ounce is analyzed in lieu of an ounce, the relative percentage remains the same.

The regular impurity testing scale of the trade can be utilized (after the analysis of the familiar ounce as above) to determine, at least approximately, the per cent. of unsound seed in sample, thus: Place the unsound seed in the scale and set the poise on the first division (on one-fourth of an ounce mark); if the scale balances the per cent. is 25 and the grade of the sample number one. Should the scale "break" at a half ounce below, it might grade number one Northwestern; if above the grade, would be rejected.

The first grain inspection rules on this continent were promulgated in 1859 by the Board of Trade of the city of Chicago. The first flaxseed inspection regulations were formulated in 1880, to found this department. Both systems are recognized as standard in this country, and are respected in Europe. They were established in the interest of equal and exact justice. Yet they have failed somewhat in their object; therefore innovations to strengthen the foundation principles should be received with consideration.

S. H. Stevens, Flaxseed Inspector.

Produce Exchange Committees.

The Board of Managers of the New York Produce Exchange appointed the following in addition to the standing committees appointed at the previous meeting of the board. The committees appointed were trade committees, and are as follows:

Relief—James R. Turner, chairman; Edward H. Dougherty, Russell C. Johnson, James S. Carney, William Knight, Lloyd B. Sanderson, William Loeb and Walter Moore.

Grain—Harry B. Day, chairman; Charles E. Wilmot, James F. Parker, Samuel F. Enge and Ernest Pfarrius.

Flour—H. Myers Bogert, chairman; John S. Baldwin, James B. Mount, Stephen B. Joseph and Edwin R. Freeman.

Provisions—Charles H. Wessels, chairman; Samuel L. Finlay, Benjamin B. Roundey, Franklin H. Stevens and Arthur L. Snow.

Lard—Lyndon Arnold, chairman; Herman F. Kanenbley, David C. Link, Robert L. Scoles and Edward Valk.

Petroleum—Josiah Lombard, chairman; Charles M. Pratt, Wright Babcock, Adolph Goepel and William H. Douglas.

Lighterage — Harrison B. Moore, chairman; Edward T. Cushing, Abram B. Terhune, Robert McCreery and Oscar R. Cauchois.

Railway Affairs—Munroe Crane, chairman; C. Percy Lamprey, John Lee, Yale Kneeland and Walter B. Pollock.

Seeds—Samuel D. Crosby, chairman; Frederick C. Kirchhoff, I. Harby Moses, William Jacot and Charles P. Coffin.

Clearings—Frederick T. Goldsmith, chairman; Herbert D. Clearman and Fred E. Story.

Naval Stores—William F. Sorey, chairman; Robert F. Paterson, Alexander Johnstone, Henry J. Hayne and John E. Camerden.

Hops—Simon Uhlman, chairman; Joseph Liebmann, John B. Hasslocher, Albro Akin and Albert Lilienthal.

Cheese—John Gledhill, chairman; Austin G. Turner, Augustus T. Shepard, William E. Smith and Thomas Bamber.

Oils—George H. Williams, chairman; Herman Loeb, Oscar S. Flash, Charles I. Long and Mansfield B. Snevily.

Butter—Lloyd I. Seaman, chairman; William V. Martin, John P. Hodgson, Jeremiah A. North and Charles E. Doty.

Steamships—Oswold Sanderson, chairman; William L. Walter, Frederick G. Messmer, Ormsby M. Mitchell and Lawrence B. Stoddard.

Hay and Straw—Martin L. Rickerson, chairman; Samuel Ingersoll, Henry Dusenberg, Thomas Lenane and William R. Tilson.

Maritime—Alfred D. Snow, chairman; John C. Seager, Frederick Klorboe, Benjamin F. Kobbe and Philip H. E. Ruprecht.

Delivery Warehouse Grain—A. Curtin Fetteroif, chairman; John Marshall and Ely Bernays.

Committee on Bills of Lading—David Bingham, chairman; James Barber and Stephen Loines.

The board also concluded that the Exchange should be represented at the State Commerce Convention, to be held up the State at some point to be determined later in the fall. Delegates will be appointed at another meeting.

The question of State canals, to be discussed by the convention, is one in which the grain men particularly are vitally interested.

The board also had three disputes about trades on the floor to adjudicate. The result was not made public. The four chemists of the Exchange, Dr. J. H. Senner, Simons & Wainwright, Stillwell & Gladding and H. Schweitzer, were reappointed for the ensuing year.

United States Marshal's Sale of Seized Chemical Compounds.

The United States Marshal for the Southern District of New York has issued the following notice:

"By virtue of a certain writ of venditioni exponas, I will sell at public auction, on Thursday, June 22, 1899, at 12 o'clock noon, at U. S. Marshal's office, Room No. 55, Third Floor, U. S. Court and Post Office Building, New York City, one case chemical compound, marked F. B. S. No. 340, imported by Geo. Lueders & Co., ex. S. S. La Champagne, March 7, 1899, the same having been forfeited to the United States for violation of the Customs Laws.

"The goods will be open for inspection Wednesday, June 21, between 10 A. M. and 3 P. M., and on the morning of the day of sale. A deposit will be required by the auctioneer from bidders, and the full amount bid must be paid immediately after the conclusion of the sale, when the goods are delivered.

"Goods not taken away as above may be sold without notice, at either public or private sale, at the option of the auctioneer, and the amount deposited by the original purchaser will be forfeited and applied on account of the amounts bid for the same. All goods are sold 'as they are,' and no allowances will be made."

The Marshal has issued a similar notice of the public sale, at the same time and place, of "one package chemical compound, marked 160,097, out of package of Elkan & Co., No. 68, imported by Hensel, Bruckmann & Lorbacher, ex S. S. Brazilia, March 15, 1899, the same having been forfeited to the United States for violation of the Customs Laws."

Chloral Hydrate Case Appealed

Frederick Schroeder has appealed to the United States Circuit Court for the Southern District of New York against the decision of the Board of General Appraisers assessing an importation of chloral hydrate at the rate of fifty-five cents per pound. The appellant bases his appeal on the following points:

1. That said merchandise can be produced either with or without the employment of alcohol.

2. That it cannot be classified under paragraph 67, Act of 1897.

3. It is not, within the meaning of the law, a medicinal preparation containing alochol or in the preparation of which alcohol is used.

4. It is an alkali, alkaloid or a chemical compound, or salt, or otherwise as enumerated under paragraph 3 of said Act, not otherwise provided for, and it is properly dutiable under said paragraph at 25 per cent. ad valorem.

5. If not as last aforesaid, it is a medicinal preparation not containing alcohol and in the preparation of which alcohol is not used (within the meaning of the law) not otherwise provided for, and it is properly dutiable at only 25 per cent. ad valorem, under paragraph 68 of said Act.

Judge Lacombe has ordered that the Board of General Appraisers return to the United States Circuit Court the record and evidence taken by them.

Dyestuffs Litigation.

In the case of the Badische Anilin and Soda Fabrik vs. Wm. J. Matheson & Co., which was commenced in 1896 in the United States Circuit Court for the Southern District of New York, and wherein the defendants are charged with infringement of the Julius patent on blue coloring matter called "Indoin Blue," Judge Lacombe last week granted a preliminary injunction restraining the defendants from selling their various forms of naphtindone. In his opinion, Judge Lacombe states that Judge Coxe has already held the Julius patent to be valid and that he therefore "starts with the proposition that the patent is valid and, since it is not disputed that defendant's product responds to all the tests of the patent, it must be held to be an infringement."

The substance of Judge Coxe's voluminous decision was printed in the issue of The Reporter for May 29.

New Corporations

Brights Chemical Company of Little Falls, N. Y.; capital, $10,000. Directors: William H. White and John Hurley of Little Falls.

The Standard Starch Company, Chicago, to manufacture and sell starch, corn products, etc.; capital, $200,000. Incorporators: I. C. Wood, W. H. Clark, H. M. Carter.

The Standard Phosphate & Fertilizer Company, at Jersey City, N. J., to deal in phosphates, guano, etc.; capital, $1,000,000. Incorporators: James N. Darrah, Kenneth K. McLaren, Harry W. Meen.

The Kammerer Glass Company, at Fostoria, O., to manufacture and deal in glassware; capital, $50,000. Incorporators: E. Kammerer, G. M. Link, P. Peter, R. W. Hall, W. McHenry, all of Fostoria.

The Kno-Phire Company, to manufacture chemicals, has been incorporated at Rochester, N. Y. The capital stock is $5,000, divided into 50 shares of $100 each. The directors are M. E. Milkman, John S. Whalen and Louis A. Whalen.

The Zonzales Cotton Oil & Manufacturing Company, at Gonzales, Tex.; capital stock, $35,000; to manufacture and sell oil from cotton seed, castor beans or other oil-bearing vegetables. Incorporators: Hugh Lewis, C. S. Ruther, W. M. Fly and others.

Louis Dessar, Pierre De Peyster Ricketts, James W. Toppin and George W. Jacobs of New York city are among the incorporators of the Federal Copper Company, which filed its charter in Austin, Tex. The capital stock is $500,000, and the object of the company is to erect and operate a copper smelter at El Paso, Tex.

Awards for Miscellaneous Supplies.

The following awards have been made for supplies for the New York quartermaster's depot. The bids were opened by Colonel Kimball on May 2:

Bidder 5, Fiske Bros. Refining Co.
20. A. F. Brombacher & Co.
21. John M. Peters.
25. D. A. Tower.
34. Smith, Worthington & Co.
40. John J. Whelan.
42. Manhattan Supply Co.
43. M. Feigel & Bro.
46. Lefler & Bender.
50. Wm. W. Harral.
56. A. G. Belden & Co.
70. Shoemaker & Busch.
71. John Wanamaker.

Item 4, 204 doz. brushes, scrubbing, $1.02, bidder 40.
5. 288 doz. do stove, $3 do.
31. 2,400 lbs. lye, 3.97c., bidder 42.
23. 1,800 cakes sapolio, 5c., bidder 50.
104. 200 chamois skins, 39.5c., bidder 46.
117. 1,000 lbs. sealing wax, 28c., bidder 25.
119. 432 pts. harness dressing, 15.98c., bidder 70.
120. 500 lbs. axle grease, 1-lb. cans, 4.19c., do.
121. 2,000 lbs. do, 5-lb. cans, 4.19c., do.
122. 2,000 lbs. do, 10-lb. cans, 4.19c., do.
123. 1,500 lbs. white lead, 25 lbs., 5.375c., bidder 21.
124. 1,000 lbs. do, 50 lbs., 5.375c., do.
125. 500 lbs. do, 100 lbs., 5.375c., do.
128. 1,200 pts. harness oil, 19c., bidder 34.
129. 500 gals. do, lard, 46c., bidder 56.
130. 500 gals do, linseed, boiled, 51.75c., bidder 49.
131. 500 gals. do raw, 49.75c., do.
132. 500 gals. do machine, not awarded.
133. 100 gals. do polishing, $1.20, bidder 56.
134. 100 gals. do neatsfoot, 49.5c., bidder 43.
135. 500 gals. do cylinder, not awarded.
136. 500 gals. do sperm, 62c., bidder 56.
137. 300 gals. turpentine, 51c., do.
138. 400 lbs. polishing paste, 12.5c., bidder 20.
147. 500 lbs. soap, castile, 8.5c., bidder 34.
148. 1,000 lbs. do common, 4c., bidder 71.
149. 288 lbs. do harness, 8.6c., bidder 5.
150. 300 lbs. sponge, 42c., bidder 71.

159. 288 paint brushes, 2-0, 32c. each, bidder 40.
160. 288 do 3-0, 40c. each, do.
161. 288 do 4-0, 85c. each, do.
162. 288 do 5-0, 96c. each, do.
163. 288 do 6-0, $1.04 each, do.
164. 60 do 3 in., 42c. each, do.
165. 144 do 3½ in., 48c. each, do.
166. 144 do 4 in., 59c. each, do.
167. 144 do 4½ in., 75c., do.
168. 5 do 5½ inch., 85c. each, do.
169. 144 varnish brushes, 1½ in., 21c. each, do.
170. 144 do 2 in., 28c. each, do.
171 144 do 2½ in., 35c. each, do.
172. 288 sash tools, No. 6, 13.25c. each, do.
173. 288 do No. 7, 15.5c. each, do.
174. 288 do No. 8, 20c. each, do.
175. 288 do No. 9, 24c. each, do.
176. 288 do No. 10, 29 1-3c. each, do.
197. 200 brushes, dust, 55c. each, do.

Southern Cotton Oil Company.

The directors of the Southern Cotton Oil Co. have issued their statement for the year ended April 30 last, in which they show profits for the year of $240,000. Of this amount $120,000 has been paid to the stockholders in dividends and $120,000 is carried forward and increases the surplus, which is now $660,000. Following are extracts from the report:

Since the last report your company has built a new mill at Newport, Arkansas—a most important point in the seed business of that section—and has bought seventy tank cars. Both of these items have been charged to Permanent Investment, which explains the increase in that account. There has been, however, a large amount of new property acquired in the extension and improvement of your plant, which has been charged to Expense Account, amounting to $49,392, the principal items of which are as follows: New seed houses at Columbia, S. C., and Savannah, Ga.; doubling the capacity and storage facilities at the Savannah Refinery and adding a laundry soap and a white oil plant; building an annex to the refinery at Houston, and re-equipping that at New Orleans so that the finest grades of oil can now be made there, besides many minor additions and improvements.

The net profits for the year have been arrived at after deducting the above amount, $49,392, as well as $27,213.17 for depreciation. The cost of all repairs and replacements, and, of course, all fixed charges and the current expenses of your business have been charged to Profit and Loss.

The financial condition of your company, as shown by the Treasurer's report, speaks for itself. Its credit could not be higher; its earning capacity is of the best and, as usual, the sole ownership vests in the stock.

(Special Correspondence to the Reporter.)

Certification of Reimported Domestic Goods.

Washington, June 16, 1899.

The Secretary of the Treasury has promulgated a decision to the effect that foreign customs certificates need not now be provided in case of reimported domestic goods. The question was recently raised by the United States Consul at Bremen, Germany, with regard to the issuance of certificates by foreign customs officers to accompany re-imported goods as part of the evidence to be presented to the collector of customs at the port of importation to secure free entry under the provisions of paragraph 483 of the Act of July 24, 1897. The decision of the Department on this point was as follows:

"As representations have been made to this Department of the impracticability of a strict compliance with the requirements of Article 332 of the Customs Regulations of 1892 that a statement shall be produced, certified by a proper officer of the customs at the foreign port from which the reimportation of American goods is made, to the effect that such merchandise was imported into that country from the United States in the condition in which it is returned, the foreign custom officers generally declining to so certify, said Article 333 is hereby amended to read as follows:

"To guard against fraud, and to insure identity, the collector shall require, in addition of proof of clearance, the production of a declaration made by the foreign exporter of the goods, before the United States Consul, of the fact that the merchandise was imported from the United States, and that it has not been advanced in value nor improved in condition by any process of manufacture or other means. But if it be impracticable to produce such declaration at the time of making entry, bond may be given for the production thereof.

"Such certificates are, therefore, not now required on the reimportation of domestic goods, and no certificate, invoice, or declaration of any kind is needed when the goods are valued at not over $100; if valued at over $100 a consular declaration of the foreign exporter is required under the provisions of Section 4 of the Act of June 10, 1890, and rulings of this Department."

Heroin and Heroin Hydrochloride.

Dr. Goldman, of Berlin (Allg. Med. Central-Zeitung), in an interesting review of the therapeutics of these remedies, states that heroin, owing to its difficulty of solution in water, is chiefly adapted for administration in powders or pills, while for administration in drops and mixtures, and especially for subcutaneous use, its water-soluble salt, heroin hydrochloride, is particularly suitable. In preparing solutions of the latter the presence of alkalies, as for example bicarbonate of sodium, liquor ammoniae and the like, should be avoided, as otherwise a precipitation of heroin occurs. For making solutions of heroin hydrochloride for hypodermatic use the water should be previously sterilized and allowed to partially cool before addition of the drug. The following formulas are suggested from the literature:

Heroin hydrochlor..... 1.0
Sol. in
Aqu. Dest. sterilizt..... 50.0
For subcutaneous use: Dose, 0.25 to 0.50 c. cm., 3 to 4 times daily.
3 to 4 times daily.

Heroin hydrochlor..... 0.10
Aqu. Amygd. amar..... 20.0
Cough drops: Dose, 15 to 20 gtt., 3 to 4 times daily.

Heroin pur..... 0,003 —0,005
Sacchar. Alb..... 0,50
D. t. dos. No. X.
For coughs in adults: One powder, 3 to 4 times daily.

Heroin pur..... 0,0005—0,002
Sacchar. Alb..... 0,50
D. t. dos. No. X.
For whooping cough: One powder, 3 to 4 times daily.

Heroin pur..... 0,005
Trional, ... 1,0
D. t. dos. No. V.
Sleeping potion: night-sweats of phthisis. To be taken with a cupful of hot fluid before retiring.

From the clinical reports thus far published (Professors Eulenburg and Leo, Drs. Manges, Freudenthal, Strube, etc.) it would appear that the dose of heroin and heroin hydrochloride in adults varies from 1-24 to 1-6 grain for internal administration, while for hypodermatic use it is recommended to begin with a minimum dose (1-24 gr.), which is gradually increased if necessary. For children much smaller doses will suffice. Both these drugs are supplied by the Farbenfabriken of Elberfeld Co., 40 Stone street, New York, the selling agents in America for the Bayer pharmaceutical products.

(Special Correspondence to the Reporter.)

Wastage Allowance on Exports of Lead Products.

Washington, June 16, 1899.

The Treasury Department, after an elaborate investigation, has made a ruling of great importance to manufacturers of lead products derived from imported lead ore or bullion, grafting a liberal allowance for wastage in the process of refining and manufacturing. This allowance amounts to 10 per cent. upon articles produced from imported lead ore and to 2 per cent. upon articles made from imported lead bullion.

As is well known, lead producers have had no little difficulty in securing from the Treasury Department concessions for drawback of duty on imported materials used in the manufacture of exported products which were freely granted to other lines of industry. The chief difficulty has been owing to the construction which the Department put upon the law requiring that the imported material "shall so appear in the exported article," as to enable the customs officers to accurately estimate its amount and value. This cause of embarrassment was finally eliminated by an opinion of the Attorney-General, in which it was held that the word "appear," as used in the law, did not necessarily refer to an ocular appearance, and that the books of the manufacturer might be considered in establishing the fact of the use of the imported materials as claimed.

This was a long stride forward, but lead manufacturers have for some time contended in vain that an allowance could with propriety be made for wastage in the process of producing articles intended for export. Some months ago the Department took cognizance of this demand and a special agent undertook an investigation to determine the number of manufacturers who desire this concession, and its probable effect upon the revenues. The report made by this official was to the effect that there seemed to be no general demand on the part of manufacturers for a wastage allowance, and acting upon this report the matter was pigeon-holed for a considerable length of time.

Recently the demand of the manufacturers has been renewed, and as the result of concerted action, the minds of the Department officials have been disabused of the impression that only one or two houses manufacturing largely for export have claimed the allowance. Another special agent was detailed to work up the case, and, after a very thorough investigation, he has reported that a fair wastage allowance is not only very generally desired by the trade, but will prove very important to manufacturers, in view of the increased competition which has resulted in a reduction in prices for the purpose of gaining a foothold in foreign markets. The special agent also reports that no difficulty will be encountered in estimating the proper allowance for wastage, and he, therefore, recommends that a regulation be promulgated for this purpose. Acting upon this recommendation, Assistant Secretary Spaulding has prepared the following regulation which will be forwarded to collectors at all ports:

"On the exportation of articles manufactured from pig lead, produced from imoprted lead ores, or from imported lead bullion, to compensate for loss or waste incurred in the manufacture of such articles, the following additions may be made:

"Add to the net weight of the exported article, after official verification, 10 per cent. of such weight, when the pig lead used in the manufacture of such exported articles was imported in the form of ore, and 2 per cent. of such weight when the material used in the manufacture of such exported articles was imported in the form of lead bullion."

Exports of Lard, Etc., for May.

O. P. Austin, Chief of the Bureau of Statistics, submits the following statement of the exports of lard, tallow, oleo oil and oleomargarine from the United States during the month of May, 1899, and during the eleven months ending May 31, 1899, to which we add tables showing the monthly shipments during the past three years for comparison:

LARD.

	Pounds.	Dollars.
May, 1899	55,084,246	3,235,433
May, 1898	72,189,435	4,650,918
Eleven months, 1899	638,947,720	38,117,097
Eleven months, 1898	653,342,673	36,247,660

	1897.	1898.	1899.
January	31,522,783	62,314,969	60,997,772
February	41,941,199	46,463,114	51,650,742
March	42,812,555	65,550,389	63,786,842
April	29,195,107	53,038,364	51,117,766
May	40,298,029	68,552,388	55,084,246
June	47,356,245	45,019,815	.....
August	42,274,588	48,066,833	.....
September	46,588,330	66,266,038	.....
October	46,136,088	71,488,481	.....
November	43,436,211	68,183,550	.....
December	71,258,478	74,723,517	.....
Totals	540,924,746	721,775,936	.....
Average	45,077,062	60,147,997	56,527,473

TALLOW.

	Pounds.	Dollars.
May, 1899	11,151,825	489,574
May, 1898	11,267,047	458,729
Eleven months, 1899	92,899,302	3,761,253
Eleven months, 1898	70,072,644	2,667,862

	1897.	1898.	1899.
January	3,006,855	5,830,141	8,926,253
February	2,549,750	3,458,702	7,088,631
March	3,501,321	8,666,644	6,517,041
April	2,629,588	11,518,027	5,995,385
May	5,388,697	11,233,740	11,151,825
June	9,079,017	10,371,540	.....
July	8,127,199	9,662,923	.....
August	5,482,584	10,615,580	.....
September	2,799,089	8,147,082	.....
October	1,698,592	7,222,693	.....
November	2,285,809	7,310,134	.....
December	7,586,089	9,592,866	.....
Totals	55,214,568	105,139,626	.....
Average	4,601,214	8,761,636	8,055,827

OLEO OIL.

	Pounds.	Dollars.
May, 1899	13,081,882	907,205
May, 1898	12,897,465	784,510
Eleven months, 1899	124,949,337	8,017,953
Eleven months, 1898	120,047,619	7,147,109

	1897.	1898.	1899.
January	6,696,089	8,582,788	9,012,969
February	7,204,655	8,430,165	9,399,349
March	8,672,513	13,971,409	13,172,038
April	8,773,671	12,363,561	12,490,677
May	10,437,250	12,897,435	13,081,882
June	11,829,333	12,530,908	.....
July	11,359,543	14,746,933	.....
August	8,966,899	11,500,148	.....
September	12,500,810	10,688,719	.....
October	9,778,352	11,676,227	.....
November	9,506,635	8,287,594	.....
December	11,645,992	10,762,801	.....
Totals	117,429,742	136,302,718	.....
Average	9,785,812	11,358,560	11,431,383

OLEOMARGARINE.

	Pounds.	Dollars.
May, 1899	441,008	40,311
May, 1898	951,155	75,990
Eleven months, 1899	5,094,866	464,077
Eleven months, 1898	3,891,912	343,230

	1897.	1898.	1899.
January	305,851	150,976	303,731
February	430,511	264,086	424,254
March	456,446	336,911	352,265
April	306,627	429,367	368,116
May	176,355	951,155	441,008
June	313,250	399,486	.....
July	177,943	695,421	.....
August	641,142	539,428	.....
September	265,527	748,248	.....
October	152,720	471,716	.....
November	194,420	412,671	.....
December	329,605	338,188	.....
Totals	3,748,457	5,737,473	.....
Average	312,371	478,123	377,875

Petroleum Exports for May.

O P. Austin, Chief of the Bureau of Statistics, submits the following statement of the exports of mineral oils from the United States for the month of May, 1899, and during the eleven months ending May 31, 1899, to which we add tables giving the quantities exported each month since January, 1897, as also totals and monthly average exports:

CRUDE OIL.

	Gallons.	Dollars.
May, 1899	5,624,839	268,937
May, 1898	9,966,687	387,852
Eleven months, 1899	97,552,576	4,468,361
Eleven months, 1898	101,890,444	3,907,741

	1897.	1898.	1899.
January	8,594,840	8,835,695	7,467,713
February	8,361,238	5,113,967	4,378,646
March	12,341,940	10,893,978	14,432,690
April	11,852,472	8,741,647	5,404,565
May	8,780,025	9,966,687	5,624,839
June	13,279,741	11,118,975	.....
July	9,928,556	10,782,816	.....
August	13,939,881	14,865,709	.....
September	7,878,570	8,476,237	.....
October	10,164,447	13,619,818	.....
November	6,022,268	8,722,732	.....
December	10,404,768	4,176,821	.....
Year	121,488,726	114,915,082	.....
Average	10,124,060	9,576,257	7,462,111

NAPHTHAS.

	Gallons.	Dollars.
May, 1899	1,208,104	92,017
May, 1898	1,884,238	106,049
Eleven months, 1899	14,873 117	1,055,169
Eleven months, 1898	14,370,768	964,272

	1897.	1898.	1899.
January	260,372	1,072,538	1,482,331
February	1,093,630	1,266,797	1,487,928
March	1,129,322	721,251	906,233
April	296,066	1,091,454	398,318
May	615,563	1,884,238	1,208,104
June	1,725,877	1,602,145	.....
July	317,391	825,790	.....
August	897,329	1,208,354	.....
September	2,474,757	1,967,828	.....
October	1,201,533	1,532,194	.....
November	2,123,510	2,301,847	.....
December	1,231,970	1,556,190	.....
Year	13,430,320	17,026,626	.....
Average	1,119,193	1,418,886	1,096,543

ILLUMINATING OILS.

	Gallons.	Dollars.
May, 1899	70,688,476	4,112,289
May, 1898	66,436,994	3,340,557
Eleven months, 1899	648,579,926	36,412,383
Eleven months, 1898	742,468,253	38,869,278

	1897.	1898.	1899.
January	47,623,153	67,074,120	45,796,292
February	59,447,022	49,228,120	41,155,202
March	59,824,071	67,168,073	61,264,672
April	52,094,744	61,284,786	51,906,299
May	70,291,809	66,436,994	70,688,476
June	75,362,563	72,291,029	.....
July	71,902,341	73,388,455	.....
August	75,611,895	72,388,455	.....
September	70,961,828	70,114,013	.....
October	71,406,746	53,485,056	.....
November	70,159,972	58,069,048	.....
December	71,786,378	50,086,378	.....
Year	795,919,525	761,152,107	.....
Average	66,326,627	63,429,342	54,162,188

LUBRICATING OILS.

	Gallons.	Dollars.
May, 1899	5,825,122	623,432
May, 1898	5,812,352	667,299
Eleven months, 1899	60,574,455	7,065,289
Eleevn months, 1898	52,677,897	6,291,780

	1897.	1898.	1899.
January	4,527,113	5,304,614	4,698,306
February	3,489,513	4,018,012	4,187,264
March	4,138,395	4,993,703	6,120,708
April	3,796,625	4,701,852	6,361,163
May	3,590,021	5,812,353	5,825,122
June	3,709,853	5,881,316	.....
July	4,042,057	4,424,050	.....
August	4,863,830	6,111,640	.....
September	4,896,709	5,584,286	.....
October	4,718,657	5,614,701	.....
November	4,364,006	5,106,845	.....
December	5,091,505	6,544,370	.....
Year	51,228,284	63,968,341	.....
Average	4,269,024	5,330,695	5,438,512

RESIDUUM.

	Gallons.	Dollars.
May, 1899	3,869,838	116,253
May, 1898	2,330,874	70,103
Eleven months, 1899	28,770,436	835,376
Eleven months, 1898	17,693,086	474,644

	1897.	1898.	1899.
January	588	3,127,950	2,941,134
February	47,040	2,460,636	450,240
March	139,230	2,167,536	2,549,400
April	421,122	959,400	2,807,322
May	1,437,567	2,330,874	3,869,838
June	2,491,566	2,216,406	.....
July	2,893,044	626,514	.....
August	3,528	3,283,182	.....
September	1,201,452	1,857,240	.....
October	262,036	5,273,058	.....
November	6,258	1,616,218	.....
December	2,277,282	3,496,290	.....
Year	11,170,213	29,418,454	.....
Average	930,851	2,451,538	2,523,587

TOTAL 9XPORTS.

	Gallons.	Dollars.
May, 1899	87,216,379	5,212,928
May, 1898	86,431,145	4,571,862
Eleven months, 1899	850,350,510	49,837,278
Eleven months, 1898	929,100,448	50,198,715

	1897.	1898.	1899.
January	61,006,066	85,412,917	62,385,776
February	72,378,443	62,091,132	51,659,280
March	77,572,961	85,944,541	85,273,703
April	68,434,629	76,779,229	66,877,657
May	84,714,994	86,431,145	87,216,379
June	96,569,600	93,109,931	.....
July	89,083,369	89,982,155	.....
August	95,316,463	97,457,340	.....
September	87,413,316	87,999,604	.....
October	87,843,419	79,524,827	.....
November	82,676,014	76,007,690	.....
December	90,791,903	65,870,049	.....
Year	994,297,757	986,480,610	.....
Average	82,858,146	82,206,718	70,682,569

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PAINT MARKET.

NOTE—Our prices are for large lots except when otherwise specified, and buyers of small quantities must expect to pay an advance on these figures. Complete prices current will be found on page 35.

Saturday Evening, June 17, 1899.

Considerable activity is apparent in the paint market, and all goods are moving freely into consumption. Lead is firmer and tending upward, because of the strikes in the smelting districts. Dry white lead is still scarce, and corroders remain firm in their views. Deliveries of lead in oil are fairly heavy, considering the weather, the contract deliveries being exceptionally heavy. There is some scarcity of domestic red lead for prompt shipment, and most dealers have advanced their quotations. Foreign leads are also in light supply, and in good demand at full prices. Stocks of litharge remain light, and demand continues active. Orange mineral is firm, and the domestic is scarce. Stocks of all oxides are very light for prompt delivery, and Florence zincs have been advanced because of the good demand and light available stocks. Dry colors are moving rapidly into consumption on contracts, and most manufacturers are behind in their deliveries. No changes have occured in quotations during the past week, but the firm tone continues. Barytes are freer, chalk is in ample supply, bulk china clay is scarce, and whiting is active. Putty is gradually becoming less active, as is usual at this season. Demand continues good for mixed paints and colors in oil, and prices are steady.

White Lead, Zinc, Etc.

WHITE LEAD.—There is still a scarcity of dry lead, and corroders generally are quoting 5c. and upward for either old or quick process, as to the size of the order. The deliveries of lead in oil continue of fair proportions. Considering weather conditions, corroders in this section report contract deliveries so far for June as being far in excess of last year, and since the year opened as being almost double as compared for the same period of 1898. During the past few days there has been an improved demand for fall delivery, but the strikes which are now taking place in the various smelters' works in the West make corroders very conservative in their offerings of the manufactured product until they know what effect this strike will have on the raw metal. So far the price has not been materially affected. Meanwhile corroders are looking after their regular trade and booking such orders as their current wants require. Foreign makes of lead in oil are in better stock, thus relieving the pressure which has been made upon the agents for several weeks past. For the present they are quoting 8½@8¾c. for the old established brands, and for those not so well known 7½c. as to make and seller. The various corroders continued their previous price list, as follows: We quote, subject to change without notice, above brands of white lead, dry or in oil, red lead and litharge in kegs: In lots of 500 pounds, 6½c.; in lots of 500 pounds and over, 5¾c.; dry white lead in barrels, ½c. per pound less than price in kegs; red lead and litharge in barrels and half barrels, same price as kegs; white lead in 12½-pound tin pails (packed in 100 pound cases), 1c. per pound over price in kegs; white lead in 25-pound tin pails (packed in 100-pound or 200-pound cases), ½c. per pound over price in kegs; white lead assorted in 1-pound, 2-pound and 5-pound cans (packed in 100-pound cases), 1½c. per pound over price in kegs. Terms: On lots of 500 pounds and over, 60 days, or 2 per cent. discount for cash if paid in 15 days from date of invoice, f. o. b. New York. Quantities: To make either of above required quantities and assortment of packages either or all of the above articles may be counted. The above prices and terms supersede all previous prices and terms offered by this company.

RED LEAD.—There is still a scarcity of domestic for prompt delivery. The chief corroders have raised their price, and are now quoting 5¾c. and upward, as to the size of the order, without the former rebate. Not in many "moons" has the demand for this oxide been as large as at present. In fact, any available stock for prompt delivery would quickly be taken up by the corroders at full prices, so short are they of stocks. Foreign makes also are in light stock available from first hands, although dealers who have stocks are generally supplying the trade at a shade under prices asked for forward contracts. German is firm, and held at 7½@8c. for arrival, as to make, quantity and date of delivery. English in first hands is still scarce, and what stock there is available commands full prices. Small sales are being made at 7½@8¼c., as to brand and seller.

LITHARGE.—While the output for glass making is very much curtailed by the shutting down of the factories for the summer vacation, there is no sign of any let up in the consumption by the large rubber factories, who are still running to their fullest capacity. Corroders all report light stocks; in fact, many of them are over-sold, and find considerable trouble in supplying the current wants of their trade. Prices remain firm at 5½c. and upward, as to the size of the order, without any rebate as usual. English glass makers' grades are all firmer, and may be quoted at 7¾@8c., as to grade, quantity and date of shipment.

ORANGE MINERAL.—French is in good request, and prices are firmer, both for prompt and forward, at 10⅝@10¾c., as to the size of the order. There is a good jobbing demand, which absorbs stocks promptly upon arrival. German is still scarce in first hands for prompt delivery, and consumers generally depend upon dealers for their current supplies. There is more inquiry for fall delivery, and a fair business has been done on the basis of 9@9½c., as to brand, quantity and date of shipment. Store parcels are held at a shade higher figures. English is quiet, but held firm at prices ranging from 9@9½c., as to make, quantity and seller. Domestic is scarce, and what little available stock there is readily commands 7¾c. and upward. The trouble is, however, to get the goods.

PIG LEAD.—The market is very firm under reports of strikes among the miners. As yet prices have not been materially affected, but should this strike continue, it is only a question of time when prices will be raised. Spot is quoted at 4.50c., and June-July at 4.47½@4.50c. St. Louis is steady at 4.30@4.35c., as to quality. Soft Spanish, £14 5s.

ZINCS.—No change in the situation. Stocks are still scarce, and the New Jersey Company is still far behind with their contract deliveries, both for export and for home consumption, and yet they have made no change in prices, which remain as previously quoted, at 4½@5c., as to quality, usual terms. Florence, however, has been advanced ½c. all around, caused by the large increase in the demand and light available stocks. We quote 7½@8c. for red, and 8@8½c. for green seal, as to quantity. French is meeting with the usual jobbing demand. As yet no change has been made in prices, though one may come at any moment.

Dry Colors.

REDS.

CARMINE.—The situation remains unchanged. Deliveries on contracts are fairly heavy, but new business is inclined to be slow. Quotations are unchanged and steady at $2.10@2.25 for bulk and $2.40@3.50 for smaller quantities.

VENETIAN RED.—Stocks are scarce for prompt shipment, and importers find difficulty in obtaining supplies abroad. Demand continues active for all positions, and prices are firm at the recent advance. First quality English is quoted at 1½@2c.; second quality, 1⅛@1¼c. Domestic is quoted at 60@90c., as to quantity and quality.

INDIAN RED.—Demand continues active for all positions, and stocks are light because of the high cost of raw materials abroad. Prices are firm, but unchanged from our last report.

VERMILION.—Quicksilver remains firm at the recent advance. The combination has not yet advanced quotations for vermilion, notwithstanding the good demand and the limited offerings for prompt shipment. The combination quotations are 61c. for bar-

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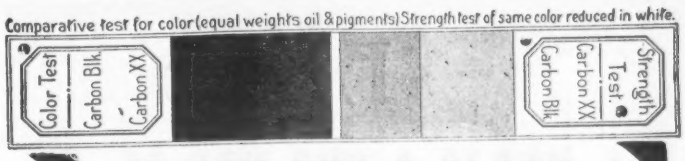

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FOUNDED 1793—INCORPORATED 1898.

1793 H Trade Mark.

Harrison Bros. & Co., Inc.

MANUFACTURERS OF

White Lead, Paints, Colors, Varnishes, Chemicals,

Philadelphia, Chicago, New York.

1793 H Trade Mark.

reis or kegs, 62c. for bags and 66c. for broken lots. English is in good demand for all positions. Prices are firm at the recent advance. We quote 65c. for kegs and 66c. for bags. Offerings of Chinese are limited and prices are steady at 80 @90c., as to quantity.

BLACKS.

CARBON.—Quotations are firm, but unchanged; demand is good both for immediate and future delivery. We quote 10@20c. for the higher grades and 6@10c. for the lower quality, as to quantity.

LAMPBLACK. — Manufacturers report an active market for all grades of blacks. Quotations remain unchanged, are firm and range 3@5c. for the low grades, 8@9c. for medium and 12@30c. and upward for the finer qualities.

BLUES.

PRUSSIAN.—The situation remains unchanged. Manufacturers are still behind in their deliveries on contracts, and there is very little stock offered for prompt shipment. Prussiate of potash has made no further advance during the past week, but the tendency is still upward. Demand is good, but is principally for immediate delivery. Quotations are firm and the tendency is upward, but no manufacturer seems willing to make the initial move. We repeat our previous quotations of 28@30c. for chemically pure domestic and 30@ 32c. for the foreign make.

CHINESE.—Consumption is active, but new business is limited to the immediate wants of the consumer. Dealers are behind in their deliveries, and prices remain unchanged and firm at 31@36c., as to quantity and seller.

SOLUBLE.—Current wants of consumption are being filled by deliveries on contracts, and we hear of little new business. Prices, however, remain firm because of the high cost of the raw materials. We quote 31@36c., as to quantity and seller.

BROWNS.

There is a good consuming demand for both umber and sienna, which is keeping stocks in this market at a low level. Prices remain steady, and we repeat our previous quotations.

GREENS.

PARIS GREEN.—Production is at a standstill and manufacturers are trying to work off their present stocks into channels of consumption, but refuse to shade prices to induce business. Deliveries on contracts are fairly heavy and new business is gradually increasing. We quote 12@14½c. as to quantity and seller.

YELLOWS.

OCHER.—There is a good consuming demand which is keeping stocks of both imported and domestic at a low level. Quotations are unchanged and firm.

Miscellaneous.

BARYTES.—Demand is gradually becoming smaller as the season advances, and the scarcity of supplies of domestic is over for the moment. Prices, however, remain firm. Stocks of German in this market are limited, and the good demand in Europe restricts shipments to this country. Prices are firm. We quote: Prime domestic, $18@20; second quality, $15.50@17; foreign, $19@20.

CHALK.—The scarcity of several weeks ago has been entirely relieved by the recent heavy arrivals. Prices are steady at our last quotations.

CHINA CLAY.—There is a good demand for bulk goods, which has considerably reduced stocks, and an actual scarcity is probable before fresh supplies reach this market. Cask goods are in sufficient supply for the present demand, and prices remain steady. We quote $15@17 for the finer kinds of imported, and $11@15 for the medium and lower grades, as to quantity and quality. Domestic remains quiet, and prices are nominal at $8.50@10, as to quantity and quality.

COBALT OXIDE.—There is a fair demand and prices are steady at the combination figure of $1.76.

FULLER'S EARTH.—Demand is quiet and stocks are in fair supply. Prices are steady at 75@80c. for lump and 75@90c. for powdered, as to quantity.

PUTTY.—Demand is somewhat reduced by reason of the advancing season. Stocks are ample. Prices remain steady and unchanged at 1.70c. for bulk, 2.20c. for bladders and 2.25c. for 1 and 5 lb. tins.

TALC.—There is a fair business doing and stocks are moderate. Prices are firm and we quote 1.10@1¼c. for French and 1½@2c. for Italian. There are no offerings of American talc in this market, and quotations are therefore nominal.

WHITING.—The situation remains unchanged. Consumption continues active and manufacturers are behind in their deliveries. Prices are firm at the combination figures, which follow: Commercial, 4½@5c.; gilders', 47@56c.; extra gilders', 57@64c.; American, Paris, 65@70c., and English cliffstone, 75c.@ $1.20. These prices are for 50 bbl. lots. For larger quantities they can be shaded.

Mixed Paints.

Manufacturers report a brisk movement into consumption at full prices. No new feature has put in an appearance to alter the situation.

Colors in Oil.

Prices are well maintained, as dealers look for possible advances in dry colors. The consuming requirements are fairly heavy.

Metallic Paints.

Considerable activity is apparent and prices are well maintained.

Varnish Gums.

No new feature has put in an appearance during the past week. Prices are unchanged and rule from steady to firm. The situation is treated more fully in the editorial columns of this issue of The Reporter.

Glue.

The situation remains practically unchanged. Production has been greatly reduced for the Summer months and the continued good demand is rapidly diminishing the present stocks. Demand is most active for the lower qualities and some grades have been almost exhausted. Prices for all grades have an advancing tendency, but no actual change has taken place during the past week.

Glass.

WINDOW.—Production has practically ceased, and, as all stocks are well controlled, advances in quotations may be expected. Demand is quiet, but is said to be fully up to the average for June, and the outlook is for a large consumption during the Summer months. Whether or not stocks are large enough to last until operations begin again remains to be seen, but the general impression prevails that there will be no shortage if the factories start up at the usual time. According to the present schedule the manufacturers and the workmen's representatives will meet about July 15 in an effort to settle the wage question and the time of starting. Prices for American glass remain firm and unchanged at 80 and 20 per cent. discount for goods from warehouse and 85 per cent. for carload lots. French glass remains quiet and importations are small because of the high prices abroad. Quotations in this market are firm at 80 and 10 per cent. discount from the French list.

FRENCH LIST.

SINGLE.

Sizes.	1	2	3	4
6x8 to 10x15	$15 50	$14 50	$14 00	$13 50
11x14 to 16x24	13 50	17 75	16 75	16 00
13x22 to 20x30	24 25	23 00	21 25	20 00
15x36 to 24x30	26 50	24 50	22 00	....
26x28 to 24x36	28 75	26 75	24 00	....
26x34 to 30x40	32 25	30 50	27 00	....
32x38 to 30x50	38 25	36 50	32 75	....
30x52 to 30x54	39 75	37 50	33 75	....
30x56 to 34x56	41 50	39 00	36 00	....
34x58 to 34x60	43 50	42 00	39 00	....
36x60 to 40x60	47 50	44 25	42 00	....

DOUBLE.

Sizes.	1	2	3
6x8 to 10x15	$21 50	$20 50	$19 75
11x14 to 16x24	26 00	25 00	23 75
18x22 to 20x30	33 50	31 75	29 75
15x36 to 24x30	36 50	33 75	30 50
26x28 to 24x36	40 00	37 25	33 75
26x34 to 30x40	45 00	42 75	38 00
32x38 to 30x50	53 75	50 50	45 50
30x52 to 30x54	55 00	51 75	46 75
30x56 to 34x56	57 00	54 00	49 75
34x58 to 34x60	59 50	57 50	53 50
36x60 to 40x60	64 50	60 50	57 50

SIZES ABOVE—$15 per box extra for every 5 inches.

All sizes over 52 inches in length, and not making more than 81 united inches, will be charged in the 84 inches.

Discount, 80 and 10 per cent.

PLATE.—Demand shows a falling off but prices remain firm at 75 and 15 per cent. discount for small orders and 80 per cent. discount for larger quantities.

Reappraisements of Importations.

The Board of United States General Appraisers has reported to the Secretary of the Treasury the following reappraisements of importations which have been appealed by the importers:

21163—Coal tar color, from Chem. fabriken vorden Weiler-ler-Neer, Herdingen, May 2, 1899. No. 44 P. Azo-yellow, entered at 2,569 marks per kilo, add packing and casks and less freight to Antwerp and New York, 5 per cent. discount, insurance and Consul fee. Advanced by disallowance of deductions.

5180, O. P., New Orleans—Olive oil, from E. Cusimano, Palermo, March 29, 1899. Olive oil for manufacturing purposes, packed in second-hand petroleum cases and boxes; entered at .50 lira per kilo. No advance. Add labor and nails.

21031—Chemical salt, from Bessler, Waechter & Co., Newcastle, April 13, 1899. Binoxide of barium (88-90), entered at £33 14s. 11d., advanced to £34 4s. 11d. per ton. Add packages.

21186—Cylinder glass, from Societe Anonyme Verrieres des Hernandez C. Lambert, Charleroi, March 31, 1899. Blue flashed double, entered at 28.25 francs per 100 feet; ruby flashed double, entered at 24.12 francs per 100 feet; pot opal plain double, entered at 35.52 francs per 100 feet; pot opal plain single, entered at 22.64 francs per 100 feet. Add travers at 2 francs per box. 1 per cent. compt. Advanced by addition of 3 francs per box for packing.

21189—Seeds n. s. p. f., from Vincenso Laurentino, Castellammare, May 8, 1899. Pumpkin seed, entered at 40 lire per 100 kilos. No advance.

(Special Correspondence to the Reporter.)

The Standard Oil Inquiry

Washington, June 14, 1899.

The Federal Industrial Commission last week completed the examination of witnesses in opposition to the Standard Oil Company. The opportunity will be given later to the representatives of the company to reply to the testimony thus far taken. The witnesses examined today were ex-State Senator Theodore F. Davis, of Marietta, Ohio, who is a producer of petroleum, and who up to four years ago was also a refiner, and Mr. Theodore B. Westgate, of Titusville, Pa., an oil refiner.

Mr. Davis testified that he had been in the oil business twenty years, that the failure of his refinery was brought about by inability to market its products at a margin sufficient to pay. His firm was confined to one grade of oil, as it had no facilities for compounding oils to produce different grades.

The Argand Refining Company, he said, got the market for lubricating oils, and sold oil to the Baltimore and Ohio Southwestern. The officials of that road became owners of a large block of the stock of the Argand Company, and it made no difference what quotations were offered by others, they were not able to sell to them.

"Was the Argand Company connected with the Standard Oil Company?" asked Prof. Jenks.

"Not that we know of," replied the witness.

"Was the Argand Company able to get special rates from the railroads?"

"We had no direct evidence of that, but we suspected it. We believed we were manufacturing as cheaply as they, and that if the freight rates had been equal, we could control some of the trade, but we were not able to do it."

Continuing, the witness said the oil of his firm was transported in pipe lines. Once he had telegraphed to one road for a transportation rate out of Marietta, and it took a month to get the rate. When they got it, it was one cent a barrel more than the rate through the pipe line. The oil in the Corning fields was not quite equal to oil of the Maxburg field, and it was sold at 17 cents a barrel less. The fact was met by the transportation being made 17 cents a barrel more than oil from the Maxburg field. In this way it became just as profitable for the witness' firm to sell to the Standard Oil Company, as it would have been to sell outside. This oil was a higher grade than the Lime oil, handled by the Standard, but it was all put on the market at one price. As producers they could not get their product on the market without being subjected to extra charges. The witness said that he had never been engaged in litigation with the Standard Oil Company over alleged discriminations of this kind in transportation.

Considerable territory, the witness said, had been bought up by different branches of the Standard Oil Company, and in some cases exorbitant prices had been paid for it. Their advantage in an action of this kind resulted from the fact that they controlled large sums of money. They were able to make arbitrary rates for everything, and oil sent through the pipe lines of the company was charged with 2½ per cent. for leakage and evaporation, besides another charge of 1 per cent. for insurance. He did not know what right the company had to charge this insurance, but the amount of money at stake was not sufficient to cause the independent producer to contest it.

As to the output of his plant, the witness said his company is now producing from 800 to 1,000 barrels a week, although their capacity is very much larger. His plant could not utilize all the by-products of a refining oil to the best advantage. The processes for utilizing these products must be in charge of an expert, and could only be carried out in very large oil refineries. He had never made an estimate to know just what profit might be secured from these by-products. Better and larger refineries would be built but the power of the Standard Oil Company is such as to make it very hazardous for any one to invest any large amount of money in an oil refinery. The compounding of oils, he said, is also another branch of the business which requires the services of an expert, and the high grade of oils sell for very good prices. From his experience he was satisfied that his competitors had sold lubricating oils of the same grade at different prices.

In reply to questions as to the employment by the Standard Oil Company of unfair methods in competition, Mr. Davis said that his office boy had been approached by agents of the Standard Oil and offered money if he would give them information in regard to his customers. The boy had come to him and told him about it, and he advised him to go ahead, in order to see how far they would proceed in this effort; but for some reason they did not pursue the matter.

Continuing, the witness said that he had been compelled to go out of the refining business on account of the competition of the Standard Oil Company, and is now only a producer of oil, selling his product to that company.

Since he had been driven out of business prices in his section had been restored to a more uniform basis, and he regarded the general average of prices as probably higher than they were in that section when he was refining oil. In describing the manner in which he had been attacked by the Standard Oil Company, he told of one instance in which water had been put in barrels of oil, and distributed where he was doing business, in order, as he believed, to produce the idea that he was selling oil so adulterated, but it turned out that he was able to show that the oil was not in barrels that had come from his refinery, and it resulted in a benefit to

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"We know of a job that was burned off and painted white with the best lead, mixed in oil "procured from one of the most reputable makers, and after a winter's exposure, the paint was "washing off like lime. * * * * * * In France they have abandoned lead, largely for this "fault, and are using zinc. * * * * * * So far there does not seem to be any trouble from "compound lead paint, so called; that is, paint made from lead, zinc and barytes, or just lead "and zinc. Lead and whiting does make a doubtful paint, liable to wash off. The trouble comes "from pure lead paint only. Hence, it is worth while to test the compound paints for "their permanency."

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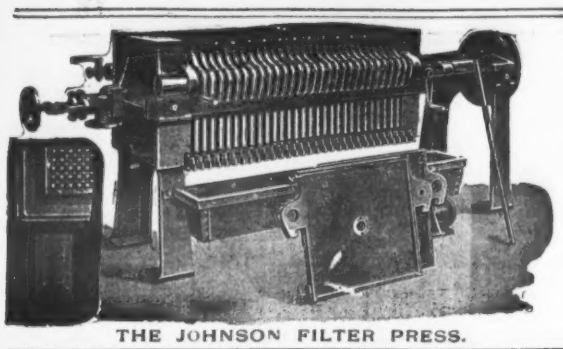

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him among the trade. He thought that there was a better opportunity for an independent refinery to-day than heretofore, as chemicals and other things used in the refining of oil are to-day lower in price than they were twenty years ago, although the iron used in various ways in plants for producing and refining oil has within the last four months very materially advanced in price.

Referring to the efforts of the Standard Oil Company to get rid of competition, the witness stated that the Argand Oil Company had within a year been bought by a branch of the Standard Oil, on a basis of 6 per cent. on $200,000. He could reproduce the works of the Argand Company for $75,000, but, in reply to a question, said that the higher price was probably due to some extent to a consideration of the good will.

Mr. Davis had no suggestion to make in regard to the legislation that was necessary to control the Standard Oil Company. He said that the Standard Oil and other companies operating in connection with it used the same methods that would be used by men in other lines of business. He also said that even under present conditions the oil industry was profitable for independent producers, the profit varying considerably, according to the character of the wells that are sunk. Some of them are very expensive and others very remunerative. He knew nothing in regard to the price paid by railroad companies for the oil they purchased from the Standard Oil Company. He said that wages paid men engaged in the production of oil were very good, expert drillers being paid $4 and $5 per day.

The next witness was Theodore B. Westgate of Titusville, Pa., who testified that he had been in the oil business eighteen years, and was at the present time connected with the Pure Oil Company, that has gone into the New York city market, where, he said it had been met with a cut of prices on the part of the Standard. The company, he said, had encountered a somewhat extraordinary condition of affairs. They had found that as long as they contented themselves with placing from 5 to 10 per cent. of the oil used in a given market, the Standard Oil Company would let them alone, but if they attempted to make it 25 to 50 per cent. they would be met with very energetic competition and cuts in prices. The witness then proceeded to read letters from a number of his customers to show the methods of the Standard Oil Company in seeking to gain their patronage. He read one letter signed by an official of the Standard Oil Company at Poreland, Ore., which threatened that in case Westgate oil was used in a neighboring city to cut prices so that it would have to be sold at one-half its cost of production.

Prof. Jenks asked the witness if he knew of any attempt on the part of the Standard Oil Company to purchase refineries which they did not intend to operate.

"Several such transactions have come under my notice," replied the witness. "In 1895 the company purchased two large refineries in Titusville, not with a view to operating them, but simply to get hold of their stock in the United States Pipe line and the Producers' Oil Company. At this time the Standard Company made a similar proposition to nearly all the refineries in that section, and three plants were sold, including the two in Titusville referred to. They were all soon dismantled. At first glance it might look as though the wiping out of these plants was an advantage to the independent producers, and to a slight extent this is true, but in the long run it was disastrous, for it reduced the patronage of our pipe lines and lost us the influence of these independent concerns."

Replying to an inquiry by Prof. Jenks as to the reasons for the reduction in the price of refined as compared with that of crude oil, Mr. Westgate said that it came largely as the result of the utilization of by-products. In the early days such by-products as benzine, tar, etc., were run into the creeks or into holes and burnt up, while at the same time the refiners spent large sums of money for fuel. "We now take out 20 per cent. of crude oil in by-products," said the witness, "and all these products bring a price as high or higher than the crude oil. Benzine is now much higher than oil, and tar is about as high. The mechanical processes of refining oil have also been greatly cheapened, the cost now being about half a cent a gallon, as against two and a half cents in the early days of the industry."

Taking up the figures presented to the Commission by Mr. F. B. Thurber some weeks ago, Mr. Westgate said they were wholly misleading, though technically correct. "The fact does not appear," said he, "although it is true, that these prices include the cost of barrels which are now worth eighty odd cents, as against two or three dollars at the earliest period covered by the table. Furthermore, it should be remembered that Mr. Thurber is quoting

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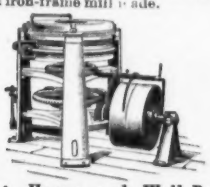

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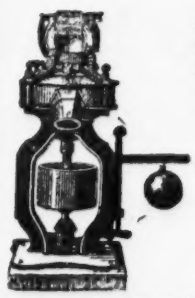

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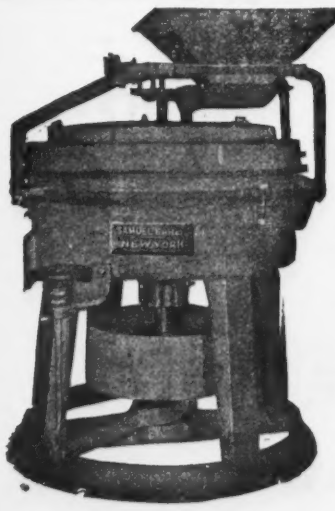

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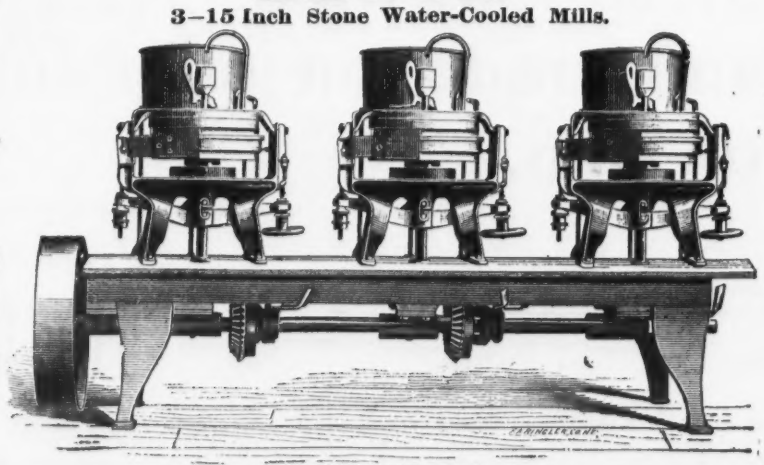

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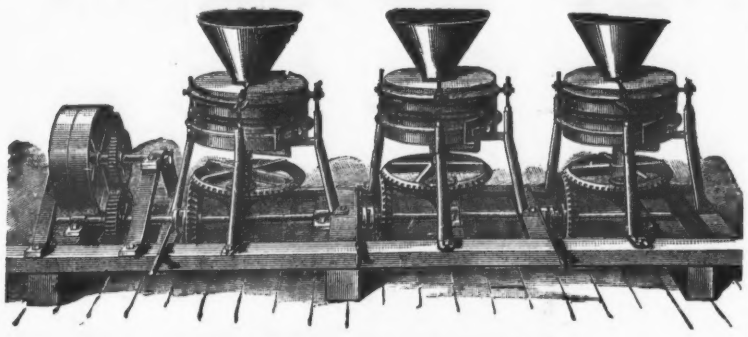

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FIG. D-13.

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From

WM E. MCKAY,
Engineer Bay State Gas Co.,
Boston, Mass.

the price of export oil, which is not the price paid by consumers in this country. We know that when the price of export oil is low the product offered for home consumption is frequently enough higher to bring the general average well up. It is therefore clear that if the Standard Oil Company has helped anybody, it is the foreigner, and not the American consumer. I admit that the Standard Oil Company has done much in the way of adopting inventions to cheapen the cost of production, but so have others, and on that score honors are even."

Mr. Westgate then took up the question of discriminating freight rates, producing a considerable number of letters, telegrams, receipts, rate sheets, tariff books, etc., in support of his statements, and said:

"I have no reason to state that I am paying a higher rate than the Standard Oil Company for oil shipped from Titusville. That is not the way the discrimination is arranged. The Standard Oil Company is permitted to under-bill its cars, which gives them a tremendous advantage that is most unfair to the independent producer. I have seen three freight receipts for full tank cars shipped by the Standard Oil Company which should have been billed at from 44,800 to 46,080 pounds per car, but which were billed at 24,000 pounds, and I believe that every car going out of Olean or any other oil shipping point of the Standard Oil Company is under-billed to its smallest capacity. Another incident of which I have no proof, but which I believe, has been brought to my attention. A party in New York bought several cars of crude oil from the Standard Oil Company, the cars holding from 6,000 to 6,600 gallons each, and weighing from 38,400 pounds up. On the freight bills these weights were put down as 24,000 pounds to the car, but a few days later corrected bills came along giving the actual weight. I do not believe this was an error, for every railroad company has a schedule giving the capacity and weight of each tank car, so that it is not necessary to make a calculation."

As showing the manner in which railroad companies combined with the Standard Oil Company, to the detriment of the individual producer, the witness stated that one point after another was being cut off from competition by the railroads which refused to make rates on oil under which it could be shipped at a profit. Continuing the witness said:

"I have here a letter from the commercial freight agent of the New York, Chicago and St. Louis Railroad, in which he states that he is unable to quote favorable rates on oil from Titusville to points in Vermont. Other merchandise could be handled on advantageous terms, but oil was directly discriminated against. The agent of the New York Central fast freight, in a letter which I have here, states that oil is not a commodity which the fast freight is permitted to handle. By some of the roads I am prohibited from shipping in carload lots to certain points, and in other cases I am charged local rates combined to cover long-haul shipments.

"As an example of how this policy operates I have the documents in a case before me. In trying to get into Montreal I asked the New York Central people for a rate from Titusville to Adirondack Junction. In the tariff book the rate to Adirondack Junction is the same as that to Boston, or 23½ cents per hundred, but by a telegram from the assistant traffic manager of the New York Central, I was advised that the company would charge me 33½ cents from Buffalo to Adirondack Junction, to which would have to be added 8½ cents from Titusville to Buffalo, making a rate of 42 cents as against 23½ cents, according to the tariff book.

"I have had most of my trouble in Vermont, which is a very good State for the sale of oil, and as an illustration of the way in which the railroads discriminate against us, I would cite the following schedule of rates from Titusville: To Burlington, 44½ cents; to St. Albans, 50½ cents; to St. Johnsbury, 36½ cents; to Newport, 38½ cents. It is a notable fact that, according to the tariff book, the rate to St. Johnsbury and Newport is the same as to Boston—23½ cents—and it is also remarkable that the roads offered us a rate of 33 cents to these points on less than carload lots, a rate from 3½ to 5½ cents less than on full cars.

"These discriminations operate greatly to the advantage of the Standard Oil Company, which ships its product to these markets from other points, which gives the railroads the opportunity to say that it makes only one rate from Titusville to all shippers. Rates are very promptly changed whenever the interests of the Standard Company demand it. For example, until the Standard Oil Company established refineries at Whiting, Ind., near Chicago, we had a rate from Titusville to Pacific coast points of 78½ cents, but as soon as the Standard began shipping from Chicago that rate was wiped out and we were charged 96 cents."

The witness cited several other instances of discrimination and quoted an agent of the Delaware & Hudson Canal Company, who made a rate of 2½ cents per ton per mile, an exorbitant charge, which the witness said was made simply to keep the independent shippers out of the territory.

"The fact is," said the witness, "the railroads do not cater to the independent oil trade. Freight solicitors do not seek oil shipments, though they are active enough in looking for other business. On one occasion we purchased a few tons of iron pipe to lay a section of pipe line, whereupon we were visited by solicitors from every road over which it could be hauled, though it was a comparatively small transaction, and yet, although I shipped from twelve to fourteen thousand barrels of oil per month, my shipments have never been solicited by the railroads."

Referring to the difficulty experienced in getting into Montreal, Mr. Westgate said that he had shipped to that city for four years, but as soon as the Standard Oil Company secured by purchase or lease practically all the refineries in Petrolia the rates were advanced, so that he was shut out. This was true of the Grand Trunk, Michigan Central and Canadian Pacific roads. He had tried to get into Montreal over other lines, but had failed. The independent oil men in Montreal had undertaken to regulate the Canadian Pacific by going to Parliament, and soon afterward the railroad was advised to withdraw its tariff book, which it did, but still maintained its rates.

As to remedies for the existing condition of things, Mr. Westgate said that if the discrimination of the railroads could be prevented the independent oil men could take care of themselves and make money. In his opinion the Interstate Commerce Commission ought to insist on a regular classification for oil, and there would be no objection if it were put in the fifth class of merchan-

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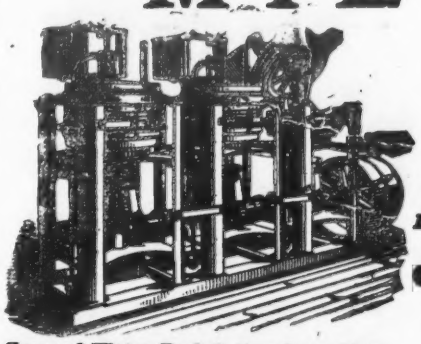

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dise. All commodities were classified, he said, until some big combination took hold of them, whereupon the classification was withdrawn and arbitrary rates were made. The witness then reviewed some of the statements made by State Senator Lee before the Commission several weeks ago, corroborating what Lee has said regarding the efforts of the Standard Oil Company to obtain control of the independent pipe lines, etc. In conclusion Mr. Westgate said:

"If this Commission will see that the law is enforced we will all be on an equality. I am not fighting the Standard Oil Company, but I claim the right to live and do an honest business. I don't fear any corporation, no matter how large it is, if it's honestly conducted, and I have no sympathy with the common talk about great aggregations of capital, but I think the government ought to see to it that there shall be no discrimination against any man who asks an opportunity to run his business on an equal basis with his competitors."

The Scottish Mineral Oil Trade.

Most of the oil companies in Scotland have now made public the results of the year's working, and, taking everything into consideration, these must be considered satisfactory. In my last monthly letter I gave a summary of the financial part of the Broxburn Oil Company's report. The report itself was issued early in the month. It stated that during the year the directors acquired the lands of Middleton Hall, extending to some fifty-four acres. The object of the purchase is not only to work the shale in these lands, but also to facilitate the working of the west-most portion of the company's mineral field which adjoins the property. The cost was the moderate sum of £3,500. The directors further stated that the increase of wages conceded to the workmen in October, and the great rise in the price of coal counterbalanced the higher prices paid for sulphate of ammonia; but, on the other hand, the year has been a record in the history of the company as regards throughput and delivery of products. It is interesting to note a few leading facts in connection with this Scotch oil company. It was registered on November 6, 1877, with a capital of £335,000, in shares of £10, all of which have been issued—£100,000 in fully paid 6 per cent. preference shares, and £235,000 in ordinary shares with £199,750, or £8 10s. per share, paid up. To March 29 last there has been written off for depreciation £349,089 9d.; paid in dividends, £602,172; and placed to reserve fund and balance of profit and loss, £12,497 7s. 6d.; making a total of £963,758 8s. 3d. Much regret has been caused not only among members of the oil trade, but in business circles generally, by the death of Mr. William Kennedy, which took place on the 20th ult., after a long illness. The report by the directors of the Linlithgow Oil Company, which was issued early in May, stated that, after providing for maintenance and repairs, there was a debit balance of £758 8s. 10d., while the sum for interest on debentures and loans amounts to £1,705 1s. 2d., making a total of £2,463 10s. to be added to the debit of £1,739 1s. 1d. brought forward twelve months ago. The directors are of opinion that the time has come when much-needed alterations and extensions should be carried out. They therefore propose to open up fresh shale, to alter the retorts so that they can be heated by gas instead of coal, and to make an addition to the refrigerating plant with the view of obtaining a larger yield of solid paraffin. In their report the directors of the Oakbank Oil Company stated that, including £1,638 8s. 4d. brought forward from the previous year, the amount at the credit of the company on March 31 was £12,691 10s., which they recommended should be disposed of as follows: £3,375 in payment of a dividend of 5 per cent., and £7,500 to the retorts' renewal account, carrying forward £1,816 10s. They stated that the continued satisfactory experience of the new retorts, of which a bench capable of retorting 200 tons of shale per day was started in the beginning of last year, had led the directors to decide to substitute as rapidly as possible the whole of the older retorts by those of the newer form. It is expected that this work, which will cost £12,000, will be finished by August. They believe that this expenditure will be defrayed within two years by the increased profits from the improved plant, while admitting the payment of a dividend to the shareholders. As regards the general state of business in the trade, there is really no sale for burning oil just now. Quotations are unaltered at 6d. to 6¼d. per gallon, according to gravity and quality. There is an exceptionally good demand for all grades of lubricating oils, and the prices are firm at £5 to £6 10s., according to gravity and quality. During the past month there has been much more inquiry for oils suitable for gas-making purposes than for some time previous, and a large number of contracts were booked at 3d. to 3¼d. per gallon for delivery during the season. The manufacturers of paraffin wax are unusually busy, and candlemakers are now stocking to meet the prospective requirements of the season's trade. Although prices are nominally unchanged, there is a distinct firmness all round. Naphtha continues to increase in value, owing to the good demand, and business has been done at the unprecedentedly high price of 9½d. per gallon, with a strong outlook for the future. There has been quite a boom in sulphate of ammonia during May, business having been done at £13, an advance of 35s. per ton on the month. This is for prompt delivery. For some weeks there has been nothing doing for forward delivery.—Oil Trade Review.

English Petroleum Markets.

London.—There has been a reversal of the previous order of things in this market since our last monthly report, and instead of heaviness buoyancy is now the prominent characteristic. A period of mistrust has been succeeded by one of confidence, at least amongst importers, who have been enabled to secure much better prices, and these, without a break, have been hardening throughout the month of May. The latest transactions in American Refined have been at 5½d. to 5⅝d., and those in Russian oil at 5⅛d. to 5¼d. for present and future deliveries, being quite ½d. per gal. dearer than on the 5th ult. This rise has been greatly assisted by the upward movement which has been started in New York, where "standard white" has been cabled at 7 dols. 20c., and "refined" (in cases) at 8 dols. .05c., as contrasted with 6 dols. 95c. and 7 dols. 70c. respectively at the lowest point in April, but the home trade here do not respond very readily to this revival of activity, and avoid committing themselves very willingly to "forward" contracts for fulfillment during the winter months. Water-white has participated in the advance, and now commands 6⅝d. to 6⅞d., but petroleum spirit remains at 9d. to 9¼d. per gal.

Importations of petroleum oil (in barrels, or their equivalent) during the first five months of 1899, 1898 and 1897:

1899	London.	L'pool.	Bristol.	Hull.	Totals.
Amer'n..	657,661	377,866	180,000	160,656	1,492,562
Russian.	267,527	196,365	....	7,000	470,892
Total..	925,188	574,231	180,000	176,655	1,963,454
1898.					
Amer'n..	671,020	400,785	205,536	158,129	1,521,677
Russian.	258,655	147,195	....	....	405,850
Total..	929,675	547,980	205,536	158,129	1,927,527
1897.					
Amer'n..	428,966	270,400	146,702	154,115	1,113,432
Russian.	237,026	153,362	....	....	390,388
Total..	665,992	423,762	146,702	154,115	1,503,820

Exclusive of the foregoing arrivals into London this year was one of 905,060 bbls., or 22,626 bbls., from the Kotei River in "Borneo," on April 24.

The separate imports of naphtha or petroleum spirit are:

	London.	L'pool.	Bristol.	Total.	1898.
Barrels..	26,418	12,897	6,493	45,808	48,583

In addition to the above, there were imported the following quantities (in barrels) of "distilled" residuum:

Into—	1899.	1898.
London	4,625	17,548
Liverpool	21,286	730
Bristol	9,252	12,936

Liverpool.—The chief feature during the past month has been the large transactions that have taken place for forward delivery, buyers taking advantage of the low offers at which they have been made to operate freely. Some improvement has taken place in the prices of Russian and American oils, but there are buyers who profess to have no confidence in the stability of values, and have purchased to satisfy only immediate requirements, especially as the present rate of consumption is at about its smallest. Refined American moves at 6¼d. to 7½d., according to brand, and Russian at 5⅝d. to 6d. per gallon.—Oil Trade Review.

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OIL MARKET.

NOTE—Our prices are for large lots except when otherwise specified, and buyers of small quantities must expect to pay an advance on these figures. Complete prices current will be found on page 35.

Saturday Evening, June 17, 1899.

Vegetable Oils.

LINSEED.—Early in the week there were a few sales made for prompt delivery at 36c., but later, with a strong and advancing seed market, crushers withdrew their stocks, and while a few were inclined to name 37c. for prompt, others declined to sell at this figure. The indications are that July and August will see higher prices, as the daily consumption of oil both here and in the West is good, with no immediate prospects of its falling off. The market closes steady at 37c. for State and Western for car lots, 39@40c. for city and Chicago 36c.

COTTONSEED, REFINED. — The past week has brought no new developments, and our comments on the situation in our last issue still hold good. Buyers in need of cotton oil invariably have had to pay full market prices, and sellers have more closely held to their asking prices. If the export demand of the past two weeks has not thus far created much stir in the market, it has all the same cleared up what oil there was for sale at the Gulf ports, and has thus further narrowed down the sources from which the demand has to be satisfied. Reports from the valley report only about 5,000 bbls. left for sale, while the Atlantic and Texas fair home consumption, which is grad- have only limited stocks. There is a ually reducing the stocks on hand and some improvement in the export demand. Cotton oil at present prices is certainly a cheap grease as compared to values ruling on other edible greases, and when the statistical position is considered, prices to-day are certainly low, and it is reasonable to expect a gradual hardening of values as the season advances, even though no help should be experienced through an advance in lard; while on the other hand, with any advance in lard it would not be surprising to see a substantial advance in cottonseed oil, and even 30c. be realized in barrels here for prime yellow. It is a surprise to the trade that oil has not advanced substantially before this, but the facts are that Europe bought considerably more than was calculated on when prices were low, and when the advance took place she continued to supply her demand from the stock on hand and contracted for, and refused to buy from this market at advanced prices. This state of affairs is also true of the home trade, who also bought largely at low figures and, therefore, saw no reason for adding to their stocks at higher prices until their previous purchases were absorbed. Owing to the constantly advancing price of linseed oil in England and the advance in tallow and other greases, the European consumption of oil has been more than fair and stocks now there, with the exception of one or two ports, are far from large, and at some points are exceedingly low; therefore, it is very reasonable to expect that by the middle of the last part of next month they will be forced to enter this market as buyers. The home trade have also largely reduced their stocks, and the demand from this source has shown a decided improvement in the past two or three weeks, and if the lard compounders experience anything like their usual August and September demand, it would appear to us that every barrel of prime or choice oil would be wanted before the new season got well under way. To resume, cotton oil is in a very healthy condition; stocks in first hands are far from large; they are in the hands of comparatively few people, well able to protect their holdings, while stocks in the hands of larger buyers, both here and in Europe, are moderate, and the demand for the various articles in which cotton oil enters as a component part is quite large; therefore, it would seem that if prices were not advanced too quickly, every barrel of oil now held would enter into consumption before now and the middle of October. There has been an increased demand for winter yellow, and large sales have been made for export at 29½@30c. The market has been well cleared up of the small lots of red oil, which have been depressing prices to some extent. Tallow, which early in the week was inclined to weakness, later under cables reporting a stronger Liverpool market, became firmer, with only limited offerings at 4 3-16c. for city. We give a report of the recent Texas meeting with the various papers read on interesting subjects, all of which will repay our readers to read them carefully. In our next issue we will discuss them more fully, as they were received too late for this issue. The market closes steady at 26@26½c. for prime yellow, 25@25½c. for off yellow, 24@24½c. for red oil, and 20@21c. for crude. The sales reported indicate how dull trade has been. They comprise 100 bbls. red oil at 24c., 350 bbls. of prime yellow at 25½c., 300 bbls. do. at 26c., 1,800 bbls. off yellow at 25@25½c., 1,250 bbls. prime yellow at 25½c., 1,200 bbls. nearly prime at 25@25½c., 900 bbls. off yellow at 25½c., 1,400 bbls. choice yellow at 26½c., 1,500 bbls. off yellow at 23@23¼c. f. o. b. New Orleans. 1,800 bbls. winter yellow at 29½@30c., 200 bbls. crude at 20@21c., and 9 tanks Atlantic crude at 17@18c.

EXPORTS OF COTTONSEED OIL FROM NEW YORK, BY COUNTRIES, IN GALLONS.

	For week ending June 15, 1899.	Since Sept. 1, 1898.	Same time last year.
Africa, Algiers	....	849,061	504,558
Egypt	....	27,000	28,350
Sierra Leone	....	2,651	....
South	....	2,925	2,807
Tunis	....	....	2,500
Argentine Republic	....	76,130	15,194
Australia &N. Z.	....	65,098	56,601
Austria	....	2,879,841	2,776,819
Belgium	....	82,763	122,062
Brazil	4,000	131,501	806,131
Br. East India	....	300	....
British Guiana	107	87,714	73,937
British W. Indies	3,928	232,592	274,887
Central America	....	3,052	1,580
Chili	....	6,478	7,994
Cuba	....	100,552	9,774
Danish W. Indies	....	6,966	13,281
Denmark	....	81,480	54,768
Dutch Guiana	....	203	311
Dutch West Indies	....	20	129
Ecuador	....	....	5,066
England	6,700	1,371,793	941,013
France	14,896	6,325,828	7,378,974
French Guiana	....	5,037	467
French W. Indies	....	391,904	351,547
Germany	....	348,083	601,127
Gibraltar, f. o.	....	168,532	....
Hayti	....	3,862	....
Ireland	....	5,000	....
Italy	2,500	1,432,746	2,176,819
Japan	....	....	500
Malta	....	8,750	41,319
Mexico	200	40,372	46,805
Netherlands	....	781,928	854,397
Newfoundland	....	29,506	26,700
Nova Scotia	....	422	162
Norway & Sweden	....	51,350	7,500
Peru	....	1,203	300
Porto Rico	....	3,332	....
San Domingo	....	62,600	49,295
Scotland	15,996	190,571	208,050
Spain	....	50,850	....
U. S. Colombia	50	21,319	13,364
Uruguay	10,354	170,754	160,687
Venezuela	....	1,123	923
Totals	59,721	17,055,282	17,596,049

EXPORTS OF COTTONSEED OIL FROM NEW ORLEANS, BY COUNTRIES, IN GALLONS.

	For week ending June 15, 1899.	Since Sept. 1, 1898.	Same time last year.
Austria	146,250	948,900	1,388,556
Belgium	....	849,000	76,004
Central America	....	250	506

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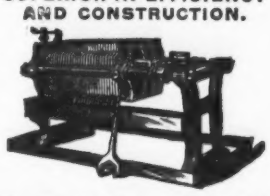

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Cuba	1,450	11,900	....
Denmark	37,500	298,800	190,000
England	40,000	1,444,050	782,550
France	....	6,108,000	2,531,300
Germany	....	377,000	328,500
Ireland	....	101,250	56,250
Italy	....	457,950	12,500
Netherlands	....	2,309,600	1,149,750
Scotland	67,750	124,000	....
Totals	292,950	13,076,700	6,506,400

EXPORTS OF COTTONSEED OIL FROM BALTIMORE, BY COUNTRIES, IN GALLONS.

	For week ending June 15, 1899.	Since Sept. 1, 1898.	Same time last year.
Belgium	....	530,450	236,250
Brazil	....	2,500	....
Br. West Indies	....	5,000	....
England	....	405,750	70,500
France	....	153,000	12,000
Germany	13,000	611,050	365,697
Ireland	....	....	26,000
Netherlands	10,000	615,700	343,010
Scotland	....	173,500	130,600
U. S. Colombia	....	20	....
Totals	33,000	2,307,220	1,205,057

EXPORTS OF COTTONSEED OIL FROM GALVESTON, BY COUNTRIES, IN GALLONS.

	For week ending June 15, 1899.	Since Sept. 1, 1898.	Same time last year.
Austria	....	....	195,000
Belgium	....	48,700	60,199
Denmark	....	176,767	2,500
England	....	287,500	48,400
France	....	1,815,101	2,749,919
Germany	....	308,850	523,050
Italy	....	12,750	10,000
Mexico	....	778,256	546,307
Netherlands	....	2,354,722	1,887,400
Totals	....	5,782,646	5,648,175

Cocoanut Oils, Etc.

CEYLON.—About all the unsold stock at dock was taken up early in the week at 5.70@5.75c., the market closing at 5⅞@6c. asked for store parcels. There has been a fair business in shipments, the sales aggreating about 600 tons for July-November at 5½c. At the close 5⅝c. was asked for further lots.

COCHIN.—The market is quiet and prices, especially for shipment, are a shade easier. There have been small sales on the spot at 7⅜@7½c., as to quantity and seller. Shipments are quoted at 6½c., with 6c. bid and declined.

CORN.—There is still a scarcity of stocks available for prompt delivery, and sales are being made of car lots at 3.60c. For July-August delivery they are asking 3.50c. For jobbing store parcels 3.75@3.80c. is named, as to the size of the order.

OLIVE.—There is only a small jobbing demand for spot stocks of prime yellow at 52½@56c., as to quality, and of green at 52@57c. Shipments are quoted at 50@51c. for either, as to quality and date of delivery. Olive foots are dull and hard to sell unless a buyer wants the goods. Then he would have to pay full prices. Prime grades are quoted at 4⅛@4¼c., and ordinary at 3¾c.

PALM.—There has been a small arrival to hand during the week, the bulk of which was sold previously for consumption. Small retail sales are being made from store at 5⅛@5¼c.

RAPE.—The usual consuming demand prevails for prime grades at 55@57c., as to quality, and of ordinary grades at 53@54c., as to quantity and seller.

Animal and Fish Oils.

COD.—Dealers report a slow movement, consumers apparently requiring little oil at present. No sales from first hands are reported. We continue to quote domestic at 33@35c. and Newfoundland at 38@40c.

DEGRAS.—There is no improvement in the demand and prices are unchanged, German being quoted at 2½@2¾c. and English at 2⅝@3c. as to quality.

LARD.—The market for the raw material has been somewhat stronger, and while the price has at times been below 5c. at Chicago, the average has been above that figure and pressers and dealers in the oil have been correspondingly firm in their views. Early in the week some sales of prime were still made at the figures quoted in our last, but later 42c. became bottom, with holders somewhat indifferent, and the range now is 42@44c. as to make and quantity, with the tendency decidedly firm, and should lard show further appreciation an advance in oil will follow. The demand has been fair, with some hesitation on the part of buyers, who apparently have little faith that the lard market will continue strong. The lower grades are in light request and are steady at previous quotations.

MENHADEN.—Reports from the fishing fleet are more encouraging, the fish being more plentiful and in fair condition. Considerable oil has been made of late and some sales are said to have been made, though no particulars have come to the surface. The current reports are that some 2,000 bbls. have been placed, the bulk to eastern dealers. For northern oil 25c. is "asked," but no sales are claimed at that figure. Southern is quoted at 19c. f. o. b. factory. There is a lot of 139 bbls. Alaska herring oil on the way from San Francisco on the City of Sydney, sailed June 8. For bleached and pressed oils there is a moderate demand at unchanged quotations.

NEATSFOOT.—The demand has been rather light during the past week, but there is no change in market values.

RED.—Saponified is a little easier, city makes being now quoted at 4⅛@4¼c. as to quantity, and Western at 4c. The demand is light. Elaine moves rather slowly at 28@30c. as to quantity.

WHALE AND SPERM.—There is no change in the situation, no sales of crude being reported, and stocks showing no increase. For bleached the demand is rather tame and prices are unchanged.

Mineral Oils.

BLACK.—There has been a continued active demand for summer, which is held at 6½@7c. Offerings of outside lots at 6@6½c. are being made.

CYLINDER STOCKS.—The demand for the filtered grades has been active, while the other grades have been in good request, the total movement being above the average. Prices are steady.

NEUTRAL.—The demand has continued active, especially for the light grades. Prices are unchanged.

PARAFFINE.—There seems to be no falling off in the consumption of this class of oils, and the demand consequently continues active. There are offerings of outside lots, but no important sales are claimed.

SPINDLE.—The demand has been good, the requirements for consumption continuing large, and the reports from the mills are satisfactory, warranting the expectation of a continuance of large demand.

Oil Cake, Meal, Etc.

There has been only a light export demand during the past week, about 300 tons have been taken at $22.50 for Baltimore, and $22.75@23 per ton here. Nearly all of the crushers are asking $23, but now and then a stray lot comes on the market, and as $22.50 is exporters' limit, it generally goes at this figure. Nothing new in either cotton or corncake and meal.

Exports of Flaxseed from New York.

BY COUNTRIES, IN BUSHELS.

	For past week.	Since Aug. 1, 1898.
Belgium	....	86,589
England	....	257,265
Germany	....	151,026
Netherlands	....	1,077,048
Sweden	....	67,938
Totals	....	1,639,873

Exports of Flaxseed from Philadelphia.

BY COUNTRIES, IN BUSHELS.

	For past week.	Since Aug. 1, 1898.
Netherlands	....	106,342

Exports of Flaxseed from Baltimore.

BY COUNTRIES, IN BUSHELS.

	For past week.	Since Aug. 1, 1898.
England	....	1,365
Ireland	....	1,209
Totals	....	2,570

Wax, Lard, Tallow, Etc.

PARAFFINE WAX.—The requirements continue large, although the shipments have not increased, amounting during the past week to only about 1,625,000 lbs. This is still below the weekly average of the past six months. The demand for home consumption continues large, and prevents accumulation of stocks. There is no outside wax offering, but pressers continue to quote 4@4½c. for 124@126 m. p., at which figures there is a good demand for home use. The principal holders quote crude at 4½c. for 117 m. p., and 4c. for 124@126 m. p. We quote: Refined at 5¼c. for 120 m. p., 5½c. for 125 m. p., 6c. for 130 m. p., and 6½c. for 135 m. p. For 0 m. p. 10½@11½c. is asked.

TALLOW.—Following the close of our last sales were made of 150 hhds. city at 4 5-16c. for export. Later prices eased off, and at the close sales of 350 hhds. at 4 3-16c., besides 200 hhds. weekly deliveries to the home trade. London cabled market unchanged, with only one-quarter of the 1,200 casks offered sold. The melters having sold up for the present, the market has settled down steady at 4 3-16c. for city and 4⅜@4½c. for tierces, country.

GREASES.—There has been a good export and home demand, even though tallow has declined during the week. While the lots taken have not been large, in the aggregate they make a good showing. Prices remain fairly steady and may be quoted at a range from 2⅜@3¼c. for brown, common to choice, and yellow 3⅜@3¾c., as to quality.

The Price of Lard at Chicago.

June.	Cash.	July.	Sept.
10	4.80 @4.92½	4.92½@4.95	5.05 @5.07½
12	4.82½@4.95	4.95 @4.97½	5.05 @5.10
13	5.00 @5.02½	5.00 @5.02½	5.12½@5.17½
14	4.92½@5.07½	5.02½@5.07½	5.15 @5.22½
15	4.92½@5.05	5.02½@5.07½	5.15 @6.20
16	4.90 @4.92½	5.00 @5.02½	5.15 @5.17½

DRUG MARKET.

(Continued from Page 33.)

We reprint the following clippings from a Calcutta newspaper and comment on the subject matter editorially:

(From the Capital, May 4, 1899.)

A meeting of shippers, at which fully a dozen firms were represented, was held last week for the purpose of taking into consideration the unsatisfactory conditions under which the shellac trade is at present being worked. The meeting marked a curious and, in one sense, an ominous departure from precedent in that it virtually voiced a revolt among the general body of shellac buyers against the methods of business pursued by one of their number. With the discussion which took place at the meeting and with the resolutions arrived at we need not deal. Our business is solely with the extraordinary state of affairs which has compelled a number of our local merchants thus to combine for the protection of their common interests.

We are of those who believe firmly in "a fair field and no favor" for all who enter the commercial arena to contend for the prizes which energy, enterprise and ability should secure. We are unable to understand that form of jealousy which is occasionally aroused among small firms by the severe and successful competition of a rival possessing greater wealth and credit, since in these aids to enterprise we perceive only the ultimate reward of pre-eminent business capabilities and organization. It is only in cases where these great advantages are unfairly applied that our sympathies lie with those less efficiently equipped for the fray. In the case in question, however, it is freely alleged that one of the firms of shellac buyers is assisting its progress to-

FOREIGN MAILS

The following table gives the date and time of closing the mails for foreign countries at the New York Postoffice. A star indicates that letters may be addressed per steamer named for the countries indicated. A dagger indicates that registered mails close at 6 p. m. on the previous day. In case of mails via steamers from Pacific ports the hour of closing is up to the date specified.

After the closing of the supplementary transatlantic mails named below additional supplementary mails are opened on the piers of the American, English, French and German steamers and remain open until within ten minutes of the hour of sailing of steamer.

Mails for—	Steamer.	Date.	Regular. Mails close at P. O.	Suppl. Mails close at P. O.
Central America (except Costa Rica) and South Pacific ports	Finance	June 10..12	m.. 1	p. m.
Belize, Puerto Cortez and Guatemala	From N. Orleans.	June 10.. 3	p. m..	—
Brazil	Wordsworth	June 20.. 9	a. m..	—
Costa Rica	From N. Orleans.	June 20..13	p. m..	—
Jamaica	From Phila.	June 20..10	p. m..	—
Europe, via Southampton and Bremen	K. Fred'k	June 20.. 7	a. m..	—
Europe, via Queenstown	Servia	June 20..11	a. m..	12.30 p. m.
Porto Rico	Evelyn	June 21.. 1	p. m..	—
Cuba, Campeche, Chiapas, Tabasco and Yucatan*	Seguranca	June 21.. 1	p. m..	—
Europe, via Southampton*	New York	June 21.. 7	a. m.. 9	a. m
Europe, via Queenstown	Germanic	June 21.. 9	a. m..	10.30 a. m.
Belgium	Southwark	June 21..10.30	a. m..	—
Porto Rico	U. S. Transport	June 21..10	a. m..	—
Grenada and Trinidad	Grenada	June 21..11	a. m..	—
Venezuela, Curacoa, Savanilla and Cartagena	A. R. Thorpe	June 21..11	a. m..	11.30 a. m.
St. Domingo and Turks Island	Carib	June 21.. 1	p. m..	1.30 p. m.
Nassau, N. P. Guantanamo, Santiago and Manzanillo	Saratoga	June 22.. 1	p. m..	1.30 p. m.
Jamaica	From Boston	June 22.. 9	p. m..	—
Jamaica	Jason	June 23.. 1	p. m..	—
Europe, via Queenstown*	Umbria	June 24.. 5	a. m..	—
France, Switzerland, Italy, Spain, Portugal, Turkey and Br. India, via Havre*	La Bretagne	June 24.. 7	a. m..	—
Netherlands direct	Statendam	June 24.. 8	a. m..	—
Scotland, via Glasgow	Ethiopia	June 24..10	a. m..	—
Italy, via Naples	Saale	June 24.. 9	a. m..	—
Norway	Hekla	June 24..11	a. m..	—
Newfoundland	Siberian, f'm Phil.	June 24.. 2.30	a. m..	—
Azores	Spartan Prince	June 24.. 7	a. m..	—
Bermuda	Orinoco	June 24..10	a. m..	10.30 a. m.
Fortune Islands, Jamaica, Savanilla, Cartagena and Greytown	Alene	June 24..10	a. m..	10.30 a. m.
Cuba*	Havana	June 24..11	a. m..	—
Pernambuco and Santos	Capri	June 24..11	a. m..	—
Nuevitas, Gibara, Vita and Baracoa	Ella	June 24.. 1	p. m..	—
St. Pierre, Miquelon	From N. Sydney.	June 25.. 8.30	p. m..	—
North Brazil	Graugense	June 25.. 4	a. m..	—
Costa Rica	From N. Orleans.	June 25..13	p. m..	—
China, Japan and Hawaii, via San Francisco	Nippon Maru.	To June 22.. 6.30	p. m..	—
Hawaii, via San Francisco	Australia	To June 23.. 6.30	p. m..	—
Australia (except West Australia), New Zealand, Hawaii, Fiji Islands, via Vancouver	Warrimoo	To June 23.. 6.30	p. m..	—
Australia (except West Australia), New Zealand, Hawaii, Fiji and Samoan Islands, via San Francisco	Mariposa	To July 7.. 6.30	p. m..	—
China and Japan, via Vancouver	Em. of China	To July 4.. 6.30	p. m..	—
Society Islands, via San Francisco	Tropic Bird	To June 25.. 6.30	p. m..	—
China and Japan, via Tacoma	Glenogle	To June 26.. 6.30	p. m..	—

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wards monopoly by methods which strike us as distinctly unfair.

It must be premised that hitherto the business has been worked through the medium of three or four firms of European brokers, over whom the firm of buyers complained of is able to exercise considerable control by reason of the large extent of its operations. It is alleged that this firm (or its subordinates) makes use of its power to compel the disclosure of business which the brokers transact with other buyers, and furthermore, that this firm (or its subordinates) frequently excludes its competitors from the market by temporarily inhibiting brokers from dealing with others than itself. For example, it is not unusual for a broker to inform buyers, on receiving their orders, that he is only permitted to work at the current price for the firm in question. The penalty of disobedience is the exclusion from a business the extent and importance of which makes the sacrifice a serious one.

It is but fair to the brokers concerned to say that the majority of them appear to resent their state of duress and to submit unwillingly to this arbitrary dictation. But so long as, in their timorous regard for their immediate interests, they do submit to it, the situation of the smaller merchant will be intolerable, unless, by combination and the introduction of new brokers, he is able to withstand the monopolizing tendencies of his great rival. Of those efforts themselves, applied in the manner described above, it is difficult to speak calmly. They are radically opposed to the whole spirit of British fairness and freedom, and ill requite that indiscriminating extension of justice and equality which has rendered it possible for merchants of all nationalities to acquire wealth, power and influence under our rule. To-day in the farthest east we are braving even the risks of war in defense of our policy of the "open door," while here in India those who have profited by it in the past are striving to close it upon their humbler competitors. It is needless to prolong the parallel. Practices of the kind referred to must be alike condemned, whether they owe their origin to the effrontery of local subordinates or are part of an authorized system of tactics, based on the pitiful proposition that one's commercial competitor has no right to live. For the credit of the firm concerned we should hope that the former surmise is the correct one and that the practices will be discountenanced and disavowed when their injustice becomes known to the responsible partners at home.

(From the Capital, May 18, 1899.)

As will be seen from the communications which we publish elsewhere, the agitation in the shellac trade, of which we wrote a fortnight ago, has resulted in brokers acceding to the demand of the Shippers' Committee. The latter, in recording the acceptance of the proposals, declare their inability to bind either themselves or shippers generally not to deal with new brokers, and intimate pretty clearly that the manner in which brokers work under the new conditions will largely influence shippers' future action. In other words, if buyers are dealing with men who honestly and honorably carry out the new conditions there will be no occasion for a revival of the present agitation. If, on the other hand, the conditions are accepted and adhered to in the letter, only to be evaded and broken in the spirit, there will be ample justification for the watchful attitude which the Shippers' Committee appear to have assumed. It will be noticed that the demands of the shippers are not for any novel concessions, but that they merely enunciate rules which are supposed to underlie the due performance of a broker's duties all the world over. It is only in the Calcutta shellac trade that they appear to be ignored.

The agitation will have done good if, besides instructing brokers in the rudiments of their business, it teaches others that power should not be abused, and that the comparative smallness and unimportance of a merchant's business afford no legitimate or moral ground for its ruthless extinction. It will have done good, too, if it secures for shellac brokers in the future some freedom from the dictation to which they have been compelled to submit in the past—a result which, we venture to think, will be found to be beneficial even to the firm that has hitherto peremptorily dictated. The labor of the freeman is always more efficient than that of the slave, and Damocles under the sword was certainly not in the best frame of mind for discharging his duties. The ancient Greek lawgiver who awarded the death penalty for all offences on the ground that "the small ones deserved it, and he could find no greater punishment for the most heinous," defeated his purpose by his unvarying severity. Similarly would it be with the constant threat, or infliction, of expulsion, which, serious though it may be for its immediate victim, has its ridiculous aspect for the onlooker. Its latest reported application recalls irresistibly the humor of the Pickwick Papers and Mr. Winkle's "terrific onslaught on a boy!"

(From the Capital, May 18, 1899.)

A meeting was held at the offices of Messrs. Ernsthausen, Ltd., Calcutta, on Monday, the first of May, at 4 p. m., at which the Shippers' Committee met representatives of the following firms of brokers, viz.:

Messrs. J. Thomas & Co., Messrs. W. Haworth & Co., Messrs. Baines & Co., Messrs. G. A. Georgiadi & Co.

As a result of a prolonged discussion, the representatives of shippers agreed to record the following as the substance of their demand for the improvement of the trade:

1. The first bid at a given price to have the preference.

2. If a broker takes an order from a buyer he must make a counter offer before selling to others the goods for which he has received the bid.

3. Brokers are not to disclose to any other firm a buyer's bids or business before the completion of the transaction.

The suggestion was also put forward that in cases where a broker fails to settle an allowance for quality amicably, an umpire should be agreed upon by buyer and broker, to whom the dispute may be referred.

The brokers' representatives wish it submitted as a grievance that shippers have dealt or are commencing to deal with new European or native brokers, and they desire that, for the future, business should be confined to the existing firms of brokers.

The meeting was adjourned to allow time for the brokers to consider the shippers' demands.

A meeting of the representatives of the following firms of shellac brokers was held at the office of Messrs. W. Haworth & Co., Calcutta, on Friday, the 5th of May, 1899, at 3 p. m.:

Messrs. J. Thomas & Co., Messrs. Baines & Co., Messrs. G. A. Georgiadi & Co., Messrs. W. Haworth & Co.

The representatives agreed to accept the three proposals submitted by the Shippers' Committee. They in return expect shippers not to deal with or encourage new European or native brokers.

With reference to the question of settlement of allowance the brokers will endeavor to arrange an arbitration when buyers deem it desirable.

H. N. Lowther, Chairman.

Calcutta, 12th May, 1899.

H. N. Lowther, Esq.:

Dear Sir—I have to acknowledge receipt of your correspondence with minutes of the shellac brokers' meeting.

Your response to the shippers' proposals has been laid before my committee and recorded. In reply I am instructed to state that the members of the committee can bind neither themselves nor other shippers, "not to deal with or encourage new European or native brokers," and that the attitude of shippers in the future will largely depend on the manner in which brokers adhere to and work the accepted proposals. Yours faithfully,

H. M. Ross.

Honorary Secretary, Shippers' Committee.

Spices.

Cassia buds are cabled firmer in the primary markets, but 25@26c. will buy on spot. Cloves are firm on spot at 7¼@7½c., but the inside figure can be shaded ½c. or more for future delivery. Pepper has been very active during the week, and all varieties show an upward tendency. Singapore black can still be had, however, at 11⅛@11⅜c.

Sponges.

The sale of sheepswool, grass, velvet, reef and yellow sponges on the Nassau Exchange for the two weeks ending May 27 amounted to $29,450. Prices are firm, and lots offered find ready purchasers. The entire fleet are now in active commission, and if the weather continues fine, sponge hookers off the Keys, also Abaw and Andros Island coasts, look for a successful harvest.

Recent trips of vessels visiting the Rock Island grounds, on the West Florida coast, have lately met with somewhat better success and owners and hookers are alike jubilant over the satisfactory prices buyers (who are loaded with orders) pay.

Latest Patents.

626,100.—METHOD OF MAKING TANNING EXTRACTS. Percy G. Sanford, London, England. Filed Nov. 19, 1897. Issued May 30, 1899.

626,110.—METHOD OF MAKING ALKALOID-CASEIN COMPOUNDS. Franz Thomas, Aixla-Chapelle, Germany. Filed Oct. 6, 1898. Issued May 30, 1899.

626,124.—CLINICAL THERMOMETERS. Sidney Yankauer, New York, N. Y. Filed June 7, 1898. Issued May 30, 1899.

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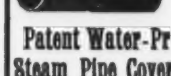
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Two staves removed to show corrugated paper lining between the inside and outside staves.
Send for Catalogue and Price List.
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NAVAL STORES.

NOTE—Our prices are for large lots except when otherwise specified, and buyers of small quantities must expect to pay an advance on these figures. Complete prices current will be found on page 35.

Saturday Evening, June 17, 1899.

SPIRITS TURPENTINE.—The week opened with prices on a firm basis, and a fair jobbing business was carried through on Monday. On Tuesday Savannah was reported firmer, and the New York market became active, stocks were considerably reduced, and values advanced 1c. Wednesday ruled firm, and on Thursday another advance took place. Receipts have been fairly heavy during the past week, but most of the supplies come from Wilmington and Brunswick. Receipts at Savannah are practically all taken up on export contracts, and very little finds its way to this market. Buyers have taken sufficient spirits during the past week to keep stocks at a low level, and at the present time the stock in yard amounts to only about 1,500 casks. Buyers, however, are cautious, and are not inclined to operate beyond their current requirements. At Savannah the tendency is to use the greater part of receipts in deliveries on contracts, and offerings are consequently limited. The market ruled firm until Friday, when exporters withdrew and prices slightly declined. The close to-day is firm at 37c. The New York market was dull yesterday, and the decline at Savannah is given as the reason. Prices, however, remained unchanged and steady. To-day there is the usual Saturday dullness, but the close is steady at 39¼c. for Southerns and 39¾c. for machine-made barrels.

ROSINS.—The past week has been rather quiet in the rosin market. Buyers exhibit no interest and purchase only in a jobbing way. Holders, however, are unwilling to shade prices to induce business, and quotations have therefore ruled steady and show few changes for the entire week. Stocks of low and medium grades are fairly heavy, but pales are in small supply and offered sparingly. The Savannah market has been fairly steady throughout the week, and values are about in the same position as at our last report. To-day there is a slight improvement in inquiry for the low and medium grades, and prices are somewhat firmer.

TAR AND PITCH.—The inquiry for tar has been limited, but is sufficient to keep stocks from accumulating. Sales have been made on the basis of previous values, which at the close remain steady. Pitch has ruled quiet throughout the week, closing steady. We quote: Tar, regulars, $2@2.10; oils, $3.50@3.60; pitch, $1.70. In the following table we give the receipts and deliveries of naval stores at the naval stores yard in New York for the week ending June 16, 1899:—

	Spts. of Turpentine.	Rosin.	Tar.
Stock in yard, June 9, 1899.	19,608	1,126	1,620
Receipts	3,977	2,472	126
Deliveries	3,917	2,063	427
Stock in yard, June 16, 1899.	19,668	1,535	1,319

Savannah, Ga., June 16, 1899.

Spirits firm at 37c.; receipts, 1,549; exports, 289; sales, 463; stock, 23,308. Rosin firm; receipts, 21,886; exports, 648; sales, 1,566; stock, 121,578. Prices: A, B, C, D, 95c.; E, $1; F, $1.05; G, $1.15; H, $1.20; I, $1.25; K $1.40; M, $1.70; N, $1.95; W. G., $2.10; W. W., $2.30.

Charleston, S. C., June 16, 1899.

Turpentine firm at 36¾c.; no sales. Rosin firm; unchanged; sales, none.

Wilmington, June 16, 1899.

Spirits Turpentine, nothing doing; prices unchanged; receipts, 283 casks. Rosin firm; unchanged; receipts, 414. Crude turpentine quiet; $1.35, $2.10 and $2.20. Tar firm; $1.30; receipts, 68.

Liverpool, June 16, 1899.

Turpentine—Spirits steady, 34s. 9d. Rosin—Common steady, 4s.

London, June 16, 1899.

Turpentine—Spirits, 34s. 3d. Rosin—American strained, 4s. 3d.; fine, 8s.

Messrs. James Watt & Sons furnish the following London turpentine statistics:

	1899.	1898.	1897.	1896.
Stock June 3	3,560a	7,239	15,898	13,001
Del'd this week	2,813b	1,369	2,074	1,924
Since Jan. 1	37,350	39,392	36,390	41,120
Price June 3	33s 6d	24s	21s	1½d 20s 3d
Sept.-Dec.	27s 6d	21s 6d	20s	10½d 19s 3d

(a) Including 52 bls of French.
(b) Including 62 bls of French.

The new brand of sulphate quinine introduced to the American market by Schoellkopf, Hartford & Maclagan, 100 William st., is meeting with considerable success, and is being used regularly by several large pill manufacturers. Prof. Victor Coblentz of the New York College of Pharmacy certifies to its purity, stating that it stands all the tests demanded by the United States Pharmacopoeia.

WANTS.

SPECIALS OR NOTICES in this column are at the rate of Two Dollars for each insertion—for eight lines or less. All over eight lines Twenty-five cents per line of about six words. The full amount in cash must accompany all orders.

VACUUM DRYERS

for sale, evaporating 500 lbs. water per hour; in operation at 536 West 14th street, New York city.

DISSOLUTION OF PARTNERSHIP

The copartnership heretofore existing under the name of James L. Morgan & Company has expired by limitation; either partner will sign in liquidation. JAMES L. MORGAN & COMPANY, 47 Fulton street, New York city.

SALESMAN WANTED

For bleached cotton waste (imported) for smokeless powder and other manufacturing industries; commission arrangement; must have established trade; also machinery waste. Address "WASTE," care of West. Union Tel. Co., 487 Broadway, New York.

WANTED

A first-class dry color maker. Address Box 83, care of this paper.

WANTED

A strictly first-class salesman in the dry color line; none need apply who cannot command trade of $100,000 per year or thereabouts; under proper conditions, an interest in the business might be arranged for right party. Address "PRUSSIATE," P. O. Box 401, New York City.

WANTED

Salesmen to sell our Black Zanzibar Anti-Rust Roof Paint, exclusively or as a side line; best paint on the market; guaranteed for five years; liberal terms made and exclusive territory given. Address COMMONWEALTH OIL CO., Cleveland, O.

ADRIAN H. MULLER & SON

Will sell at auction on Wednesday, June 28, 1899, at 12½ o'clock, at the New York Real Estate Salesroom, 111 Broadway, by order of trustees (unless previously disposed of at private sale): U. S. Patent No. 573,483, dated Dec. 22, 1896, for improvements in process of making chloroform and apparatus therefor; U. S. Patent No. 535,552, dated March 12, 1895, for improvements in making acetone; U. S. Patent No. 535,553, dated March 12, 1895, for improvements in apparatus for making acetone; Canadian Patent No. 49,623, dated Aug. 5, 1895, for improvements in process of and apparatus for making pure acetone; U. K. Patent No. 5,255, dated March 12, 1895, for improvement in process of and apparatus for making pure acetone; Belgium Patent No. 114,527, dated March 12, 1895, and French Patent No. 245,720, dated June 20, 1895, for improvements in process of and apparatus for making acetone. For particulars or other information, apply to LOUIS MEYER, Trustee, 78 & 80 Wall street.

For Sale or To Let
The Old
Caspar Schneider Chemical Works
located in Stapleton, Staten Island. Suitable for manufacturing purposes of all kinds. Buildings in good condition, containing boilers, engines, machinery, fixtures, tools and appliances of every description.
Tanks, Filter Presses, etc., etc. Abundance of good water through well on premises.
Splendid opportunity for acquiring complete manufacturing plant near city. For further information address THOMAS N. CUTHBERT, 15 Cortlandt Street, New York.

FOR SALE.
Twin mixers (Ross); three mixers to hang under ceiling, heavy and strong; two three-roll pigment mills (one granite rolls, one chilled rolls); one breaker for lump paints; one paste paint filler (K. & H.); one 30-inch powdreing mill. Large assortment iron paint mills; three 30-inch lead mills. STATE WANTS AND WRITE FOR PARTICULARS.
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PETROLEUM MARKET

Saturday Noon, June 17, 1899.

The news from the producing fields during the past week has been of more than ordinary interest, as it may be regarded as fairly indicating the probable conditions later on in the season. The number of new wells reported is about the same as during previous weeks since the weather and roads have become favorable to the prosecution of field work, but the proportion of dry holes has been larger and efforts to find important extensions to older fields have proven futile, while the productive wells brought in have been of low average capacity. These have been discouraging features, and when taken in connection with the advance in the price of pipe, making the cost of sinking a well so much higher than formerly, the report that many locations which had been determined upon will be abandoned, or at least drilling deferred until the conditions are more favorable, is probably well founded. With a curtailment in drilling operations and the new wells coming in small, the next report of the pipe lines may be expected to show a change in the statistical situation. But other conditions may develope which will give a new impetus to development work, and it is safer to await results than base calculations on indications, however apparently plain they seem. The reports of the pipe lines for the month of May showed a large increase in both runs and deliveries, and a further reduction in stocks, but the report has had no effect on market values, notwithstanding the confidence of the operators and the higher bids for certificates. A synopsis of the last report of the principal pipe lines is appended:—

NATIONAL TRANSIT COMPANY.

	April.	May.
Outstanding certificates ..	1,882,000	1,878,000
Credit balances	4,260,889	4,548,227
Net stocks	6,142,889	6,426,227

TIDEWATER PIPE COMPANY.

Outstanding certificates ..	.....	.....
Credit balances	286,906	239,162
Net stocks	286,906	239,162

BUCKEYE PIPE LINE COMPANY.

Outstanding certificates ..	10,500,000	10,500,000
Credit balances	3,224,911	2,839,158
Net stocks	13,724,911	13,339,158

Refined and Products.

There has been some inquiry for refined in barrels for export, but the engagements have been few and unimportant. The total engagements amount to something over 175,000 bbls., nearly all for bulk shipment. The stocks abroad are said to be rather light, especially in the Continental markets, and it is thought shipments will increase. The price of barreled oil has been steady at 7.20c. for New York loading and 7.15c. for Philadelphia loading. The principal foreign markets are steady. Quotations to-day by cable were: Antwerp, 17½f.; Bremen, 6.20m.; London, 5⅝d., and Liverpool, 5⅝@5½d. Freight rates were steady at 2s.@2s. 1½d., hence to London, and 2s. 3d.@3s. 6d. to Continental ports, as to port and vessel. Home trade lots have been in fair request, and are steady on the basis of 6½c. for 150 deg. water white from tanks and 9@9½c. in barrels.

Cases for export have been in light request, and sales of about 100,000 are reported. The price of plain tops has been steady at 7.95c. Freight rates are firm. The nominal rates for large vessels are: For Amoy, 23@24c.; Bombay, 16½@17c.; Calcutta, 16@17c.; Colombo. 22@23c.; Java, 20@22c.; Padang, 22@23c.; Hong Kong, 22@23c.; Saigon, 20@22c.; Shanghai, 24@25c.; Singapore, 18@19c., and Yokahoma, 23@24c.

Crude for export has been in fair request, and sales of about 50,000 barrels are reported. Washington crude is quoted at 7.20c. in barrels. Cases for export have not been in request and no sales are reported.

Prime city naphtha has been steady at 10c. For export no sales are reported.

Closing Quotations.

CRUDE.

National Tran. Certificates..₱ bbl.	$1.13½@1.14½
Washington crude in bbls..₱ gal.	7.20
Washington crude in bulk.....	4.70
Residuum, bbls, for export.....	4¼@ 4¾

CRUDE AT THE WELS.

The following are the prices paid by the pipe lines for crude as delivered from the wells:

	1899.	1898.
Tiona .....₱ bbl.	$1.28	95
Bolo	1.23	—
Pennsylvania	1.13	85
Barnesville	1.03	75
Corning	96	68
New Castle	88	60
North Lima	85	61
South Lima	80	56
Indiana	80	56

REFINED—FOR EXPORT.

Cargo lots for export.....₱ gal.	—	@	7.20
In bulk	—	@	4.70
Philadelphia loading	—	@	7.15

REFINED—JOBBING LOTS.

In barrels, bkgs. included.

120 fire test, S. W.....₱ gal.	—	@	8¼
130 fire test, S. W.....	—	@	8½
150 fire test, W. W.....	—	@	9½
In bulk from tanks.....	—	@	7
300 fire test.....	8¼@		9

REFINED IN CASES—110 FIRE TEST.

Two five-low screw, cargo lots.....	7.95
5,000 to 10,000.....	8.05
1,000 to 5,000.....	8.15
700 to 1,000.....	8.25
400 to 700.....	8.35
300 to 400.....	8.45
200 to 300.....	8.55
100 to 200.....	8.45
Under 100.....	8.95

NAPHTHA AND GASOLENE.

Naphtha, crude, car lots, 68@72 deg..	—	@10
Naphtha, crude, cargo lots, 68@72 deg—		@10
Naphtha, crude, 70 deg.....	10	@10½
sweet, 62 or 63 deg.....	11½@12	
70 deg.	12	@12½
76 deg.	12½@13	
"stove"	11½@12	
Gasolene, 86 deg.	14	@15
88 deg.	16	@17
90 deg.	19	@20

Petroleum Statistics.

RUNS—PENNSYLVANIA OIL.

		Day.	Total.	Av'ge.
Friday,	June 9.....	78,217	682,225	75,803
Sat.-Sun.,	" 10 & 11	33,318	715,543	65,078
Monday,	" 12.....	89,843	805,386	67,116
Tuesday,	" 13.....	77,769	883,146	67,934
Wedn'sday,	" 14.....	72,719	955,865	68,208
Thursday,	" 15.....	71,509	1,027,374	68,492

	1896.	1897.	1898.	1899.
Jan....	2,676,193	2,670,695	2,745,712	2,420,071
Feb....	2,473,288	2,637,771	2,442,436	2,222,889
March..	2,676,264	2,911,172	2,814,029	2,649,528
April...	2,879,608	2,789,575	2,652,552	2,618,249
May....	2,839,902	2,852,124	2,681,118	2,705,791
June...	2,811,414	2,929,868	2,566,767	.....
July....	2,919,382	2,902,632	2,487,001	.....
Aug....	2,870,915	3,062,668	2,622,849	.....
Sept....	2,772,212	3,002,002	2,525,032	.....
Oct....	2,858,544	3,023,053	2,487,837	.....
Nov....	2,701,688	2,948,854	2,485,140	.....
Dec....	2,916,148	2,894,296	2,589,197	.....
Year..	33,445,571	34,724,700	31,100,360	.....
Avge...	2,787,964	2,893,725	2,591,697	2,535,306

DELIVERIES—PENNSYLVANIA OIL.

		Day.	Total.	Av'ge.
Friday,	June 9.....121,077		758,786	84,309
Sat.-Sun.,	" 10 & 11	27,397	786,183	71,471
Monday,	" 12.....103,829		890,003	74,167
Tuesday,	" 13.....	59,515	949,518	73,039
Wedn'sday,	" 14.....	60,280	1,009,778	72,128
Thursday,	" 15.....	71,025	1,081,423	72,095

	1896.	1897.	1898.	1899.
Jan....	2,532,604	2,533,263	2,903,813	2,475,510
Feb....	2,248,406	2,305,390	2,132,151	1,899,859
March..	2,436,008	2,772,133	2,625,124	2,635,445
April...	2,223,092	2,453,728	2,421,383	2,377,486
May....	2,418,434	2,546,696	2,392,830	2,578,579
ne....	2,218,782	2,555,959	2,134,814	.....
July....	2,510,180	2,707,317	2,563,391	.....
Aug....	2,404,095	3,100,208	2,695,584	.....
Sept....	2,539,922	2,951,221	2,585,253	.....
Oct....	2,594,520	3,628,538	2,839,481	.....
Nov....	2,494,528	3,312,597	2,398,056	.....
Dec....	2,603,638	2,753,008	2,375,731	.....
Ttls..	29,284,210	33,621,058	30,367,611	.....
Avge...	2,440,351	2,801,755	2,530,634	2,393,376

CHARTERS—CRUDE EQUIVALENT.

		Day.	Total.	Av'ge.
Friday,	June 9.....	68,254	544,077	62,675
Sat.-Sun.,	" 10 & 11.	59,286	723,363	65,760
Monday,	" 12.....	24,762	748,125	62,344
Tuesday,	" 13.....	41,270	789,395	60,723
Wedn'sday,	" 14.....	55,556	844,951	60,354
Thursday,	" 15.....	40,317	885,268	59,018

	1896.	1897.	1898.	1899.
Jan....	1,834,675	1,960,649	2,701,308	1,736,232
Feb....	1,759,056	1,092,064	1,882,355	1,550,794
March..	2,231,547	1,917,670	2,203,141	2,461,826
April...	1,755,524	2,324,256	1,759,600	1,855,857
May....	1,929,212	2,101,829	1,971,260	2,214,071
June....	2,444,060	2,204,998	2,325,911	.....
July....	2,306,000	2,533,853	1,991,972	.....
Aug....	2,440,557	2,176,978	2,327,140	.....
Sept....	2,363,602	2,524,897	2,105,151	.....
Oct....	2,218,573	2,619,428	1,670,084	.....
Nov....	2,164,114	2,260,634	1,611,940	.....
Dec....	2,103,771	1,968,572	1,424,940	.....
Year..	25,610,781	26,386,028	23,973,908	.....
Av'ge..	2,134,882	2,198,830	1,997,820	1,995,156

CHARTERS FOR THE WEEK.

The total charters for refined, crude, naphtha, &c., in bulk, barrels and cases, during the week ending June 16, and from Jan. 1, were as follows:

	Week.	Year.	1898.
Refined, bbls. & blk.	175,400	4,278,500	4,939,700
Refined, cases	108,000	7,788,000	9,281,000
Crude, bbls. & blk..	49,800	830,600	897,100
Crude, cases	....	....	67,000
Naphtha, bbls.	....	48,600	120,100
Residuum, bbls.....	....	240,700	205,100
Lubricating, bbls...	....	9,000	8,000
Barrels, cde, eq....	371,985	10,928,975	11,855,240

CLEARANCES FOR THE WEEK.

During the week ending June 16, and since Jan. 1, the clearances of petroleum, in gallons, from the port of New York were as follows:

	Week.	Year.	1898.
Refined	7,075,836	202,049,063	237,787,812
Crude	.....	1,187,110	1,015,002
Naphtha	2,050	3,421,522	3,174,049
Residuum	4,989	4,134,535	658,427

EXPORT STATISTICS.

The following table shows the total exports from the port of New York and from the United States reduced to crude equivalent, in gallons, for the week ending June 16; also total shipments to date, with comparison with 1898:

From N. Y. for week ending June 16.	9,434,448	
Total from N. Y. from Jan. 1, 1899..	270,585,854	
Same period last year.....	328,065,415	
Decrease	57,479,561	
From U. S. for week ending June 16.	18,218,909	
Total from U. S. from Jan. 1, 1899..	436,884,837	
Same period last year.....	550,352,245	
Decrease	113,467,408	

TOTAL EXPORTS BY PORTS.

	1899.	1898.
New York	270,585,854	328,065,415
Philadelphia	147,126,566	198,947,499
Baltimore	16,355,254	22,657,865
Boston	347,259	672,533
San Francisco	469,904	295,933
Grand total	436,884,837	550,352,245

Foreign Quotations.

REFINED.

	Antwerp.	Bremen.	London.
Monday	17½@—	6.20	5⅜@—
Tuesday	17½@—	6.20	5⅜@—
Wednesday	17½@—	6.20	5⅜@—
Thursday	17½@—	6.20	5⅜@—
Friday	17½@—	6.20	5⅜@—
Saturday	17½@—	6.20	5⅜@—

PETROLEUM CHARTERS.

New York.

Following is a list of vessels chartered and loading or to load petroleum at New York, Philadelphia, Baltimore and Boston. Quantities are refined in bbls unless stated otherwise:

Week ending Feb. 3.

Br bk Samaritan, Shanghai, 25c.....cs 80,000

Week ended Feb. 17.

Am shp St. Paul, Japan, 22c.....cs 70,000

Week ended Feb. 24.

Br. bk. Thistlebank, Java, 20, 21 and 22c. . . ..cs. 90,000

Br. shp. St. Mirren, Japan, 23@24c...cs. 85,000

Week ended March 3.

Ger shp Renee Rickmers, Japan, 23c, cs, 75,000

Week ended March 10.

Ger str Ithaca, Hong Kong, 26c.....cs 100,000

Week ended March 24.

Am shp St. John, Japan, 21@22c.....cs 70,000
Br bk Bandaneira, Shanghai, 26c.....cs 80,000
Br shp Dovenby Hall, Shanghai 26c..cs 90,000
Br shp John Cooke, Shanghai, 26c.....cs 65,000

Week ended March 31.

Am shp Dirigo, Hong Kong, 23c.....cs 120,000
Ger bk Elizabeth, Baltic, p. t..... 7,000
Am shp John McDonald, Hong Kong, 22c. .....cs 80,000
Br bk Howard D. Troop, Shanghai, 25c. .....cs 90,000
Br shp Troop, Shanghai, 25c.....cs 65,000
Ger shp Stephan, Stockholm, 2s. 6d.... 8,000
Br bk Lydgate, Shanghai, 26c.....cs 100,000
Br bk Galgate, Shanghai, 26c.....cs 80,000

Week ended April 14.

Dch shp Tromp, Java, 20@22c.....cs 75,000
Ger bk Ariadne, Ger Baltic, 2s. 6d..... 3,300

Week ended April 28.

Dch shp De Ruyter, Java, 20, 21@22c.cs 70,000
Br shp Kistna, Calcutta, 16½c.....cs 80,000
Br bk Glencaird, Calcutta, 16½c.....cs 95,000
Br bk Glenclova, Calcutta, 17c.....cs 95,000

Week ended May 5.

Dch bk Nil Desperandum, Java, 20, 21 & 22c. .....cs 45,000
Am shp Henry Villard, Tsintau and Kaochow Bay, 24c. .....cs 55,000
Br shp Erne, Calcutta, 16c.....cs 60,000
Am brg Harry Smith, Canary Islands, p. t. .....cs 20,000

Week ended May 12.

Am shp Samuel Skolfield, Mauritius, p.t. cs 50,000
It bk Avanti Savola, Saigon, p. t.....cs 50,000

Week ended May 19.

Br shp Boadicea, Rangoon, p. t.....cs 70,000
Br shp Oreaila, Shanghai, 24c.....cs 70,000
Nor bk Skomvaer, Java, 20, 21 & 22c..cs 65,000

Week ended May 26.

Br bk Springbank, Java, 20, 21 & 22c.cs 100,000
Am shp R D Rice, Japan, 21@22c....cs 80,000
— shp Nagasaki or Fusaw, 21½ @23½c. .....cs 70,000
Am shp L Schepp, Japan, 21@22c....cs 65,000

Weew Ended June 2.

Am bk J. H. Ingersoll, Pernambuco, 18c. .....cs 30,000
Dch bk Willem Eggerts, Java, 20, 21@ 22c. .....cs 50,000
Am shp Com. T. H. Allen, Japan, 21@ 22c. .....cs 80,000
Ger shp Louise, London, 2s. 5¼d....nap 9,000
Br shp Genista, Shanghai, 24c.....cs 70,000

Week ended June 9.

Br bk Annasona, Rangoon, 19c.....cs 55,000
Br bk Peru, Mauritius, p. t.....cs 15,000
Ger shp Camelia, Baltic, p. t..... 8,000
Br shp Aladdin, Java, 20, 21 & 22c...cs 65,000
It bk Fede, Saigon, 23c.....cs 50,000

Week ended April 28.

Br bk Still Water, Zanzibar, 23c.....cs 40,000
It bk Madonna Pompei, Napies, 13½c. cs 28,000
Dch bk Krimpen a d. Lek, Java, 20, 21 @22c. .....cs. 40,000

Philadelphia.

Week ended March 3.

Br shp Allegiance, Japan, 23@24c,...cs, 46,000
Br shp, Japan, 22 & 23c.....cs, 60,000

Week ended March 10.

Ger shp Mabel Rickmers, Japan, 26@ 24c. .....cs 80,000

Week ended March 31.

Br shp Victoria Regina, Java, 20, 21 @22c. .....cs 75,000

Week ended April 7.

Ger ship Fritz, Marseilles, 2s 5d.....cde 10,000

Week ended April 14.

Ger shp Chile, Japan, 23@24c.....cs 90,000

Week ended April 21.

Br bk Alcides, Calcutta, 17c.....cs 100,000

Week ended April 28.

Br bk Amazon, Japan, 22@23c.....cs 80,000

Week ended May 5.

Ger bk Lisbeth, Japan, 22@23c.....cs 100,000
Br shp Cumberland, Japan, 22 & 23c..cs 70,000
Ger shp Theo. Fischer, Marseilles, p. t. .....cde 10,000

Week ended May 12.

Nor shp Sydfid, Japan, 22@23c.....cs 65,000

Week ended May 19.

Br sh Victoria Regina, Java, 20, 21 & 22c. .....cs 80,000
Ger bk Zion, Geile, p. t..... 6,000

Week ended May 26.

It bk Catarina Cacace, Sicily, 13½c..cs 30,000
Am shp A J Fuller, Japan, 21 & 22c..cs 70,000
Ger str Theodore Fischer, Marseilles, 2s. 4½d. .....cde 11,000

Week ended June 9.

Br str Strathord, Japan, p. t.....cs 85,000

PETROLEUM CLEARANCES.

Following the the clearances of petroleum from the ports of New York, Philadelphia, Baltimore, Boston and San Francisco on the dates named. Refined, unless otherwise specified.

New York.

June 6.

Ital bk Pellegrina O, Freemantle, 9,000 cs
Nor str Kvarven, C Bolivar, 75 cs

June 7.

Nor str Hildur, Maracaibo, 220 cs
Nor str Hildur, Curacao, 960 cs, 1 bbl

June 8.

Br str James Brand, Dover, 144,530 gls blk
Am str Santiago, Nassau, 7 bbls, 15 cs
Am str Santiago, Cuba, 160 cs
Br str Hildebrand, Para, 3,305 cs, 10 bbls
Br str Hildebrand, Manaos, 2,949 cs

June 9.

Br bk Albertina, Rosairo, 15,000 cs
Am str Advance, Colon, 1,680 cs
Mary E Morse, Havana, 400 cs
Am sch Julia Francis, Arroyo, 50 cs
Am sch Julia Francis, Humacao, 100 cs ref, 2 cs ben
Br str Bellucia, Montevideo, 50 cs gas
Br str Bellucia, Buenos Ayres, 10,500 cs
Br str Altai, Kingston, 142 cs, 2 bbls
Br str Altai, Savanilla, 300 cs
Br str Altai, Greytown, 1,620 cs
Br str Orinoco, Bermuda, 143 bbls, 10 cs
Br str Ardanrose, Puerto Barrios, 300 cs
Br str Ardanrose, Kingston, 1,900 cs, 2 bbls
Br str Ardanrose, Belize, 160 cs
Br str Ardanrose, Puerto Cortez, 20 cs
Br str Ardanrose, Port Maria, 545 cs
Br st Ardanrose, Montego Bay, 175 cs
Br str Ardanrose, Annatto Bay, 100 cs

June 10.

Br brig Venturer, San Andreas, 3,250 cs, 11 bbls
Am str Arkadia, Porto Rico, 1,300 cs
Span str Manuel L Villaverde, Progreso, 100 cs
Ger str Olinda, Hayti, 30 cs
Port str Peninsular, Azores, 200 cs
Br sh Ellen A Reed, Melbourne, 160 cs ben, 5 cs nap, 20 cs gas, 26,000 cs ref
Ger str Dalecarlia, Rio Janeiro, 1,000 cs
Ger str Dalecarlia, Santos, 1,000 cs ref, 100 bbls resid

June 12.

Br str Kenmore, Anjier, 136,687 cs
Br sh Ellen A Reed, Melbourne, 10,000 cs

June 13.

Br sch Marion, St John, N B, 350 bbls
Br str Toxteth, Calcutta, 80,000 cs
Ital bk Mariannina, Plymouth, 2,924 bbls

June 14.

Swed bk, Wanja, Tubor, 2,495 bbls
Am sh Sam Skofield, Port Louis, 10,800 cs
Am sh Sam Skofield, Zanzibar, 38,000 cs
Dtch str Rotterdam, Rotterdam, 1,750,000 gls blk
Br str Antilla, Nassau, 100 cs

June 15.

Am bk Alice, Auckland, 11,000 cs
Ger str Wilkommen, Flushing, 1,270,000 gls blk

Boston.

June 9.

Bk Willard Mudgett, Sierra Leone and a market, 8,700 cs

Philadelphia.

May 27.

Br str Astrakhan, London, 21,208 gls blk add

May 31.

Br str Mackinaw, London, 550 bbls

June 1.

Ger str Geestemunde, Flushing, f o, 73,806 gls blk add

June 3.

Br str Aureole, Cette, 1,771,526 gls cde blk

June 5.

Br str Aral, South Shields, 1,316,989 gls blk

June 6.

Fr str Ville de Donai, Calais, 722,297 gls cde blk

June 7.

Ital bk Carlo, Palermo, 30,000 cs
Br str Manhattan, Hull, 1,381,176 gls blk
Am sch Lida Fowler, Old Providence, 100 cs

Baltimore.

June 5.

Am sch Mabel Darling, Tarpun Bay, 14 bbls

June 7.

Ger str Diamont, Flushing f o, 1,500,000 gls blk

San Francisco.

June 6.

Sch Mary Dodge, Kahului, 440 cs

June 7.

Str Curacao, Mexico, 50 cs

June 8.

Str City of Sydney, Central America, 170 cs
Bktn S G Wilder, Honolulu, 200 cs

June 9.

Bk Martha Davis, Honolulu, 25 cs ben, 5 cs gas

EXPORTS OF PETROLEUM.

Following are the exports of petroleum from the port of New York, in gallons, during the past week, and since Jan. 1, as also the exports during the corresponding period of last year:

Refined.

	For week.	Since Jan. 1.	Last year.
Aalborg	.....	497,037	170,403
Aarhuus	.....	870	1,206,700
Adelaide	136,809	550,400	727,100
Aden	.....	66,000	110,000
Alexandria	.....	310,540	.....
Algiers	.....	182,400	600,959
Algoa Bay	.....	416,270	250,539
Amoy	.....	525,000	.....
Amsterdam ...	.....	5,075,000	5,142,500
Anjier f. o....	1,366,870	6,352,030	4,332,510
Antigua	.....	21,309	24,410
Antofagasta ...	.....	14,000	12,000
Antwerp	.....	7,580,000	8,500,000
Arica	.....	.....	4,250
Auckland	105,600	229,640	204,100

Avonmouth		7,350,000	2,850,000
Azores	2,000	96,799	130,516
Bahamas		3,122	1,781
Bahia		718,350	1,168,020
Bangkok			843,020
Barbadoes			310,252
Baranquilla		62,550	70,500
Beira		45,000	6,500
Belfast			850,000
Belize	1,600	84,620	101,700
Bermuda	7,336	116,347	130,873
Bluefields		8,120	31,010
Bocas del Toro		10,000	10,777
Bombay		1,445,440	2,199,990
Brisbane		256,320	731,200
Buenos Ayres	105,000	2,712,232	3,015,440
Calcutta	800,000	1,868,480	4,498,360
Caldera		1,750	1,750
Callao		136,000	271,940
Campeche		660	2,000
Canary Islands		805,800	50,000
Cape Coast		195,160	
Cape Gracias		3,160	1,548
Cape Town		853,554	437,660
Cartagena		140,760	180,899
Carupano		23,100	36,970
Ceara		50,100	129,440
Chari'tet'n, PEI			11,000
Christiania		1,275,000	
Ceiba		2,750	1,000
Ciudad Bolivar	750	15,040	48,970
Colon	16,800	212,603	278,750
Copenhagen			614,500
Corinto			98,000
Cork		394,995	391,500
Coro		5,455	14,000
Corral		45,000	25,000
Cuba	6,940	199,069	247,548
Cumana		300	6,700
Curacoa	9,651	73,884	87,889
Delagoa Bay		192,550	104,800
Demerara		225,220	294,800
Desterro		222,390	165,910
Domenica		19,088	10,950
Dover f. o	144,530	11,152,100	13,006,000
Dublin		1,600,000	1,584,300
Dunedin		217,920	314,400
Dutch Guiana		109,352	111,000
East London		330,931	454,272
Esjerb			116,900
Eten		7,000	2,000
Flushing f. o.	1,270,000	56,895,000	63,732,650
Frederica		638,250	358,500
Freemantle	86,400	805,200	419,000
French Guiana		36,611	52,334
Frontera		5,000	
Gefle			576,225
Gibraltar		282,528	388,700
G'd Bas, WCA			100,000
Grenada		55,050	43,500
Greytown	16,200	53,450	67,224
Guadaloupe		57,000	113,250
Guanta		4,000	4,450
Guayaquil		189,000	157,300
Halifax		102,072	19,266
Hamburg		80,500	4,339,500
H. Breton, N.S.		1,033	3,124
Havre		600	213,934
Hayti	300	279,371	342,127
Hermosand			398,500
Hiogo			943,300
Hodeidah		80,000	760,000
Hong Kong		9,884,640	6,094,870
Honolulu		405,000	225,000
Hull		1,100,000	
Iquique		3,000	3,000
Iquitos			1,320
Jamaica	27,927	521,573	465,162
Koenigsberg			130,900
Kolding		141,197	
Lagos		198,000	
La Guayra		253,960	368,229
Laguna		200	
La Libertad			200
La Plata		20,000	15,000
Lisbon		28,563	65,100
Liverpool		2,730,054	3,176,800
Liverpool, N. S.		31,000	
Livingston		10,479	9,257
London		12,990,406	12,566,415
Lulea		109,750	
Lyttleton		96,000	124,800
Macassar f. o.			302,710
Macelo		247,000	289,600
Madeira		27,000	26,000
Manaos	29,758	240,445	189,520
Manchester		527,950	
Maracaibo	3,050	95,870	76,165
Maranham		103,782	222,222
Martinique		248,331	92,351
Mauritius	108,000	108,000	
Melbourne	343,600	1,611,260	3,343,383
Mocha			100,000
Mollendo		10,000	
Moluca		92,000	
Montevideo		767,800	1,703,930
Montserrat		250	1,200
Mossel Bay		31,500	64,370
Naples		230,831	
Nassau	1,506	54,133	67,623
Newcastle, Aus			141,000
Newcastle, Eng			500
Old Providence			1,915
Oporto		245,594	314,986
Oran		206,600	52,457
Palermo			216,903
Passamayo		11,000	11,500
Para	34,610	633,638	950,323
Parahyba		100,000	77,500
Payta		2,000	5,000
Penang		1,152,010	1,684,970
Pernambuco		669,790	1,884,950
Philippine Is'ds			520,000
Pimental		7,000	2,000
Pisco			8,000
Pitea		75,000	
Plymouth	153,172	1,328,172	
Port Elizabeth		336,106	201,452
Portishead		32,102	8,906
Port Limon	1,050	43,640	45,619
Port Natal		1,046,450	716,370
Porto Cabello		164,120	190,351
Porto Rico	13,350	245,125	131,940
Progreso	1,000	11,920	1,830
Puerto Barrios	3,000	10,500	12,454
Puerto Cortez	200	15,640	18,327
Punta Arenas		22,000	39,120
Queenstown			334,660
Rangoon			443,900
Reunion		260,000	
Rio G. do Sul		647,070	795,563
Rio Janeiro	10,000	1,085,500	1,790,860
Rosario	144,000	864,776	1,115,979
Rotterdam	1,750,000	21,833,000	20,888,300
Saigon			809,760
Salaverry		26,000	20,000
Samarang		917,210	
San Andreas	22,061	26,743	26,666
San Domingo		145,130	372,290
San Fernando		4,800	13,800
Santa Martha		500	950
Santos	10,000	1,714,260	1,411,260
Savanilla	3,000	71,212	100,345
Shanghai		10,586,690	22,318,290
Sierra Leona		10,350	10,000
St. Croix		27,060	27,409
St. John, N. B.	18,200	18,200	1,000
St. John's, N.F.		205,952	224,530
St. Kitts		57,800	40,310
St. Lucia		27,864	32,594
St. Martins		490	3,400
St. Nazaire		359,996	
St. Pierre, Miq.			1,338
St. Thomas		23,850	16,050
St. Vincent, C.V.		29,250	30,000
Stockholm			817,206
Svendborg			172,695
Sydney		1,997,170	2,265,550
Talcahuano		1,729,500	2,030,800
Tampico		6,040	100,152
Townsville			96,000
Trinidad		279,235	312,226
Truxillo		3,350	5,570
Tuborg, Denm'k	126,795	352,245	
Turks Island		5,125	4,627
Valparaiso		799,760	824,500
Vera Cruz		9,500	4,000
Waterford		203,389	
Wellington		262,160	7,098,130
Yokohama		1,625,740	6,498,130
Zanzibar	380,000	380,000	530,000
Totals	7,075,836	202,185,053	237,787,808

Crude.

Algoa Bay			9
Brisbane			13,178
Demerara			526
Frontera			100
Havana		1,151,900	773,039
Melbourne			10,000
Porto Rico		135,000	218,150
Santiago		200	
Tampico		100,000	
Totals		1,387,100	1,015,002

Naphtha.

Adelaide		1,756	2,290
Algoa Bay		30	450
Auckland		3,840	
Bahia		775	1,475
Belize			152
Bermuda		3,622	4,245
Bremen			350,250
Brisbane		611	4,240
Buenos Ayres		66,480	32,760
Cape Town		1,342	3,575
Copenhagen			25,400
Cuba	20	677	3
Curacoa		536	895
Delagoa Bay		1,500	200
Dublin			25,000
Dunedin		4,429	3,840
East London			400
Freemantle			822
French Guiana			57
Gefle			20,500
Halifax			5
Hayti		20	4,292
Honolulu		800	
Hull		74,797	74,797
Jamaica		104	264
La Guayra			70
Lisbon			300
Liverpool		903,342	920,323
London		1,822,743	1,818,600
Lyttleton		3,080	1,638
Manaos		6,840	5,838
Maracaibo		48	
Maranham			19
Melbourne	1,530	54,642	33,196
Montevideo	500	2,195	2,020
Mossel Bay		114	
Para		285	7,809
Pernambuco		10	
Puerto Cortez			125
Portishead		388,643	221,000
Port Limon		64	100
Port Natal		820	740
Porto Rico		623	237
Queenstown			51,120
Rio Janeiro		475	2,950
Rotterdam		10	
Santos		3,000	2,200
St. Croix		45	90
St. John, N. B.			250
St. John's, N.F.		80	100
St. Nazaire		50,014	12,544
St. Thomas			5
Savanilla		200	458
Stockholm			15,200
Sydney		11,280	61,054
Trinidad			14,544
Tuborg, Denm'k		8,000	
Valparaiso		400	
Wellington		270	2,050
Totals	2,050	3,421,657	3,547,077

Export Trade in Printing Ink Machinery.

J. H. Day & Co., of Cincinnati, report recent shipments of their large three-roll printing ink mills to London, which orders were placed with them only after a thorough canvass of the American market for the best value in that line of machinery. During the present week they will ship four of these mills to same city, and report very bright prospects for an increasing export trade in this line.

When American manufacturing enterprise has reached a point where the city of London gets its printing ink mills from Cincinnati, we need not be greatly surprised to see Newcastle getting its proverbial coals from the same place. We certainly appear to have fallen upon a period which is disturbing all kinds of business records, precedents and traditions, and in which the apparent impossibility of yesterday is the well established fact of to-day.

W. H. Andrews, of the Pratt & Lambert Co., is confined to his house by illness.

PRATT'S PATENT

PREPARED GASOLENE

Adapted to all kinds of Gas Machines. 86°, 88° and 90° Gravities.

Pratt's Deodorized Stove Gasolene For use in Vapor Stoves. Made in accordance with the recommendations of the Vapor Stove Manufacturers and guaranteed not to smoke, smell or gum the burner.

Redistilled Naphthas Also Fuel Oil, Lima Crude, Distillates, &c.; prepared especially for Gas Companies and obtainable either in barrel or tank car.

Boulevard Gas Fluid For use in Vapor Street Lamps, Plumbers' Torches, &c.

Double-Distilled Deodorized Benzine and Naphtha of all grades and gravities from 62° to 76°, for manufacturing varnishes and mixed paints, rubber and gossamer goods, floor and table oil cloths, as well as for general use of druggists, dyers, cleaners, etc., etc.

The above goods can be had in quantities to suit the purchaser everywhere in the East, either through our agents or from us direct.

Standard Oil Co., Pratt Works

Proprietors "Pratt's Astral Oil" 26 Broadway, New York

ESTABLISHED 1865.

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BANKERS,

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Buy and sell on commission Stocks and Bonds either for cash or on margin, and deal in all kinds of

Investment Securities

H. J. MORSE. W. M KIDDER.
CHAS. D. MARVIN. GEO. S. COE.

INDUSTRIAL SECURITIES.

The reports as to the condition of general trade continue satisfactory, there apparently being no change except such as is naturally incident to the approach of midsummer. In the lines of trade represented by The Reporter a fair average business is reported in dyes, drugs and oils and a moderately active business in chemicals and paints. The industrial situation continues eminently satisfactory, except so far as strikes have proved an annoyance and retarded work. Nearly all industries report a most prosperous present condition and satisfactory outlook for the future. Substantial evidence of the exceptionally prosperous condition of the iron and steel manufacturing industries is presented in the announcement made during the past week of a raise of about 25 per cent. in the wages of some 45,000 men, the largest advance affecting so large a number of men yet announced. The situation in the textile industries is also said to be exceptionally good. The labor situation has become threatening and during the past week several important strikes were inaugurated. At Buffalo trouble has broken out afresh, the freight handlers at the principal railway docks having gone on strike and it is feared this will spread. Garment makers in this city have gone on strike for higher wages and a reduction in the hours of labor. In Cleveland the electric railway operatives have gone on strike and stopped travel, the cars being all tied up, while some disturbances and damage to property is reported. The situation in the mining districts is growing worse and trouble of a serious character is feared. These are the more important complications, but numerous smaller strikes have been reported and more are threatened. The great agricultural staples have developed strength, with cotton the only prominent exception. Wheat opened the week at 81⅝c. and on Tuesday receded to 80½c., but since has gradually gained in strength, reaching 83¼c. on Friday, though it closed at 82⅝c. for July delivery. Corn has taken a similar course, advancing from 39½c. on Monday to 40¾ on Thursday and closing at 40½c. on Friday. Oats were nominally steady. Cotton was rather weak, the sales being at 5.87@5.94c., with the highest on Monday and the close on Friday at the lowest. Lard has shown some strength during the past week, averaging rather above 5c. at Chicago for July delivery, but closed on Friday at 5c. The market for time money ruled easy during the entire week, and the supply continued ample, while the demand has been good and the volume of business has been fully up to the average. Rates at the close were 3 per cent. for 60 to 90 days, 3@3½ per cent. for four to five months and 3½@3¾ per cent. for longer periods, with higher rates where the collateral was largely made up of industrials. Money on call at the Stock Exchange has ranged from 2 to 3 per cent, with the bulk of business being done at 2½ per cent., while the average was about 2½ per cent. The closing rate on Friday was 2½ per cent. Mercantile paper has been in good demand throughout the week, while the supply has increased, resulting in large business. Rates at the close were 3@3½ per cent. for 60 to 90 days' indorsements, 3¼@3¾ per cent. for choice single names having four to six months to run, and 4@5 per cent. for other grades. Announcement of the City Bank to ship $2,000,000 gold was made. This makes the total shipments since the commencement of the movement $7,500,000. The price of silver was irregular early in the week, but became steady and closed on Friday at 60⅞@61½c. per ounce for commercial bars and at 61⅛@61¾ for Government assay bars, showing a slight shrinkage from the ruling price a week ago. Mexican dollars closed at 48½c bid and 49½c. asked. The market for sterling exchange has been dull, with rates a little irregular, and the market closed quiet and steady. Rates for actual business at the close were 4.85⅝@4.85¾ for 60 days, 4.87⅝@4.87¾ for demand and 4.88¼@4.88⅝ for cables. The supply of grain and cotton bills was very light, while rates were firm and the demand light. Rates at the close were 4.85@4.85⅝. The Industrials have received a fair amount of attention and Sugar and Tobacco were especially active, though both suffered a decline, this extending to practically the whole list, with Rubber and Lead the only prominent exceptions, though these showed no advance. The general list of securities dealt in on the Stock Exchange was irregular, though inclined to heaviness, while the volume of business was rather above the average.

In the following table are given the closing quotations Friday night. The market review is complete to Saturday's close:

Name.	Amount.	Bid.	Asked.	Last Sale Bonds.
Am. Cotton Oil Co.	$20,237,100	35¾	36½	
pref.	10,198,600	91½	92½	
bonds 8% g. 1900	3,068,000	—	—	105—June 9, '99
Am. Degras Co.	500,000	—	—	
Am. Fisheries Co.	10,000,000	—	—	
pref.	2,000,000	—	—	
Am. Linseed Co.	16,750,000	—	—	
pref.	16,750,000	—	—	
Am. Soda Fountain Co.	1,250,000	5	10	
pref.	1,250,000	50	58	
2d pref.	1,250,000	12	18	
Am. Spirits Mfg. Co.	28,000,000	10½	10¾	
pref. 5% limit	7,000,000	29	31	
pref. 6% g. 1915	2,000,000	—	—	116—June 9, '99
Am. Straw Board Co.	6,000,000	29	29½	
Am. Sugar Refining Co.	36,968,000	152⅞	153	
pref. 7%	36,968,000	117	119	
Am. Tobacco Co.	17,900,000	96½	97	
pref. 8%	11,935,000	140	146	
div. scrip 1896	3,762,000	—	—	101½—June 15, '99
Celluloid Co.	3,000,000	88	91	
Chesebrough Mfg. Co.	500,000	337	345	
Con. Stock & Pet. Ex. Mem.	.....	—	—	$800—Feb. 9, '99
Diamond Match Co.	14,000,000	149	150	
Dixon Crucible Co.	.....	100	102	
General Chemical Co.	12,500,000	50	—	
pref. 6%	12,500,000	99	—	
Glucose Sugar Refining Co.	26,000,000	66½	68	
pref. 7%	14,000,000	106	107	
Harrison Bros. & Co.	1,000,000	—	—	
pref.	1,500,000	—	—	
bonds 5%, 1924	1,300,000	—	—	
International Pulp Co.	5,000,000	—	—	
National Lead Co.	14,905,400	30	32½	
pref. 7%	14,904,000	110	112	
National Linseed Oil Co.	18,000,000	—	—	
6% gold deb.	1,400,000	3⅝	4½	
National Starch Co.	4,450,000	5	7⅜	
1st pref. 8%	2,219,400	45	60	
2d pref. 12%	1,846,800	15	23	
1st mort. 6%, 1920	3,337,000	—	—	100—May 16, '99
National Wall Paper Co.	30,000,000	70	80	
bonds 8%	8,000,000	—	—	
New Jersey Zinc Co.	3,040,000	—	157	
Penn. Salt Mfg. Co.	2,000,000	113	115	
Pittsburgh Plate Glass Co.	9,850,000	140	141½	
pref.	150,000	257	—	
P. Lorillard Co.	5,000,000	—	—	
pref.	2,000,000	120	125	
Planters' Compress Co.	.....	110	120	
Proctor & Gamble Co.	1,250,000	375	390	
pref.	2,250,000	190	200	
1st mort. bonds	.....	112	115	
Produce Ex. Membership	.....	—	—	110—June 14, '99
Quicksilver Mining Co.	5,708,700	2	2½	
pref. 7%	4,291,300	8	10	
Royal Baking Powder Co.	10,000,000	—	—	
pref.	10,000,000	99¼	99½	
Southern Cotton Oil Co.	2,000,000	55	60	
Standard Distilling Co.	16,000,000	17⅝	18	
pref.	8,000,000	64¼	66	
Standard Oil Co.	102,233,700	452½	455	
Stillwell, Bierce & Smith Vaile Co.	500,000	—	—	
U. S. Leather Co.	52,711,100	5¾	6⅛	
pref. 8%	62,111,100	69¾	70⅛	
bonds 6% g.	5,280,000	—	—	118⅛—Mar. 9, '99
U. S. Playing Card Co.	3,600,000	—	—	
U. S. Printing Co.	3,500,000	—	—	
U. S. Rubber Co.	20,166,000	53⅞	54	
pref.	19,400,500	116	116½	

Sugar stock was one of the most active on the list, but was inclined to weaken, notwithstanding repeated reports of an understanding between the conflicting interests. The investigation by the Congressional Committee was seized upon to depress the stock and this was credited with bringing it down below 153.

The fluctuations during the week have been from 150½@161, the lowest Tuesday and the highest Monday, closing to-day at 152 bid.

Cotton Oil stock appeared to be influenced by the course of the general market, there being no news about the concern, though it was contended that the good exhibit made by the Southern Company gave reason to expect a similar showing from this; but there was no special confidence shown and the last sale on Friday was at 36, the lowest of the week.

The fluctuations during the week have been from 36@37⅜, the lowest Tuesday and the highest Monday, closing to-day at 36 bid.

Lead stock was very sparingly dealt in, and as there was no news beyond reports as to the business of the concern, which is said to have been rather slow of late, there was little variation in the price of the stock, the last sale being at 30½.

The fluctuations during the week have been from 29½@30½, the lowest Monday and the highest Wednesday, closing to-day at 30 bid.

Whiskey stock received some support early in the week, but was inclined to be rather heavy and later sagged off permanently below 11, with the last sale on Friday at 10⅝. There was no news of consequence to affect the stock.

The fluctuations during the week have been from 10¼@11¼, the lowest Monday and the highest Monday, closing to-day at 10⅜ bid.

Linseed Oil stock attracted very little attention, and was depressed on reports from Chicago, among which was one of a proposed investigation of the concern's standing and methods. Sales of transfer certificates were made on Monday at 4 and on Thursday at 3¼. Stock of the new concern sold at Chicago on Monday at 8@8½, on Friday at 7¾@8 for common, while preferred receded to 47⅞@48⅛.

Rubber stock received considerable attention and was supported by reports of good showing the concern could make. The variations were due to trading influences, the range being 52½@54⅞, the lowest on Monday and the highest on Thursday, while the last sale on Friday was at 54.

Tobacco stock was actively traded in, but was inclined to weakness. The range for the week was 96@99⅝, the highest on Monday and the lowest on Friday, with the closing sale at 96⅝.

Leather stock sold sparingly at 5⅞@6, with the last sale on Friday at 6.

Standard Oil stock sold at 459 and advanced to 460, closing strong at that figure.

New Jersey Zinc sold at 130 by auction, 60 shares changing hands.

The annual meeting and election of officers of the Consolidated Stock and Petroleum Exchange was held last Monday. The former officers were all reelected, there being few dissenting votes. The committees have been selected, but have not yet been publicly announced.

INTEREST ON DEPOSITS.

THE NEW JERSEY TITLE GUARANTEE AND TRUST COMPANY

CAPITAL, - - - - $200,000.00
UNDIVIDED PROFITS, - - 350,000.00

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TEXAS COTTONSEED CRUSHERS' ASSOCIATION.

The Texas Cottonseed and Crushers' Association held its fifth annual convention at San Antonio, Tex., last week.

Upon calling the convention to order President Allison reminded those who intended to go on the excursion to Mexico of the importance of enrolling their names at once with Ernest Muenzenberger, representative of the Mexican National Railway, who was present to attend them.

Secretary Robert Gibson called the roll of members, and the following answered through their representatives or in person:

Planters Oil Mill, Alvarado; Austin Oil Manufacturing Company, Bowie Cottonseed Oil Company, Blooming Grove Cotton Oil Company, Milam County Oil Company, Cleburne Oil Company, Corsicana Oil Company, Ennis Cotton Oil and Ginning Company, Grandview Oil Mill Company, Groesbeeck Cotton Oil, Gin and Compress Company, Hillsboro' Oil Company, Itasca Cottonseed Oil Company, Jefferson Cotton Oil and Refining Company, the Marlin Oil Company, Landa Cotton Oil Company of New Braunfels, San Antonio Oil Works, Empire Oil Mill Company, Temple; Waxahachie Cotton Oil Company, Whitewright Cotton Oil and Refining Company, Hunt County Oil Company, Wolfe City; H. W. Caldwell & Co., machinery, Chicago; Eichenberg & Co., buyers, Galveston; J. W. Walker & Co., brokers, Houston; Munger Import and Machinery Company, Dallas; Mente & Co., bags, New Orleans; F. W. Brode & Co., brokers, Memphis; A. R. McCollum, Waco, editor Cotton Ginners' Journal, honorary member; Clarksville Cottonseed Oil Company, Wortham Cotton Oil Company, S. A. Kavitt, McGregor; Carl Eichenberg, Galveston; Herbert Godwin, Memphis; J. C. Weaver, Rockdale; O. E. Dunlap and wife, O. E. Dunlap, Jr., Waxahachie; R. K. Erwin, Miss Lena Parker, Miss Cora Lowe, Waxahachie; W. W. Boyd, Hillsboro; W. L. Haskins, Midlothian; Mr. and Mrs. D. W. Cheatham, Clarksville; B. A. Dinwiddie and wife, Miss Nora Devoe, B. S. Sivley and wife, John W. O'Neill, Clarksville; George Wolf Holstein, Wolf City; Richard Moore, G. E. Light, Pilot Point; J. B. Dale, Jr., Greenville; J. N. Hughes, Whitewright; J. G. Falls, Memphis; A. Allison, Ennis; W. C. Hargrove, Pittsburg; J. H. Watson, Blooming Grove; Harry Landa, New Braunfels; F. W. Brode, A. H. D. Perkins, Memphis; Lou Hudson, Rockdale; P. G. Dismukes, Austin; P. E. Cooper, Georgetown; W. R. Moore, Ardmore; John Woodhead, Victoria.

On motion of Col. W. W. Boyd, of Hillsboro, the customary Committee on Credentials and Representation was dispensed with, and all interested in the proceedings were invited to participate in the business and pleasure of the association.

President Allison then delivered his annual address as follows:

President's Address.

Gentlemen of the Convention:

In bidding you welcome to this your fifth regular annual convention and in congratulating the association upon the liberal attendance here, I have no idea of burdening you with any attempt at speechmaking. But bearing in mind that this is a meeting of business men for business purposes, some accounting of the stewardship with which at your last meeting you honored me is due, and some review of the year's events may not be out of place.

The year that has passed since last we met has been big with important events to the nation and to commerce. A war farreaching in its significance has been fought. One of the oldest and proudest of the nations of the Old World has felt the righteous anger of an aroused people, and with the blood of her soldiers and sailors has atoned for centuries of wrong and oppression, and in mingled terror and amazement has humbly sued for peace at the feet of the young giant who, while she slept upon a crumbling throne, had arisen in that land which four centuries before had been loyally dedicated to a Spanish sovereign.

Flushed with victory and strong in his newly aroused vigor, the American eagle has spread his wings for flights to tropic lands. New stars have been added to our flag. New countries stand ready to pour their commerce into our ports, and strange peoples in unknown tongues shout allegiance to our common country.

While at home bounteous crops have blessed our lands and from the golden wheatfields of the North and the whitened wealth of our own South are wafted the mingled songs of praise and gratitude to a beneficent providence, and over the whole land the hum of crowded workshops and of busy commerce attest a prosperity scarcely equaled in the history of our country.

Nor has your association been idle. Your ever-watchful and faithful secretary and your efficient treasurer will acquaint you with the details of the work attempted and the results accomplished in your behalf, and I must not anticipate them with more than a brief mention of the field that has been covered.

Within less than a week after your last meeting in Galveston the association was actively at work contesting the action contemplated by the transportation lines of Texas in forcing the export business of Galveston to be concentrated at one pier, and in adding to the terminal expenses at that port the unloading and wharfage charges hitherto absorbed by them. A committee was sent to Austin who, after conference with the railroad authorities, were able to effect an arrangement under which the single pier feature was eliminated and the absorption of the wharfage charges continued, thus saving to the crushers of Texas a sum equivalent to about twenty-five cents on every ton of cake and meal exported.

Shortly after this, the work already begun some time before of the readjustment of the seed tariffs was completed, and the reduction in the "short haul" was effected, which has saved so much and been in other ways of such material benefit to the interior mills.

The question of adverse legislation in France and Germany has also had the continued attention of your association, and much has been done to put the matter properly before our Government and list its aid in protecting our products in he markets of those countries.

That these and other benefits of the work of your association are shared equally with you by those mills in Texas, who have, for various reasons not enrolled themselves among your membership or contributed to your expenses, must be to you a cause of generous satisfaction; while they, let us hope, are duly appreciative of the labor performed in their behalf and are only deterred by considerations of modesty from making substantial recognition of it.

It is much to be regretted, however, that every mill in Texas is not with us in actual effort, as they doubtless are in spirit, in the work we are undertaking, and could with proper support and united effort be surer of accomplishing. For, while all the 103 mills in the state share proportionately with us in any good accomplished, it is hardly fair that the labor and expenses should be borne by an association numbering scarcely more than half of them among its members.

For all that your association has accomplished is as nothing to be compared with what remains to be done, and could be done by the united efforts of all the mills.

The reduction in your seed freights which has been secured but points the way to what should and can be done in this direction.

In the export markets your products are sold in competition with those of every state in the South; yet there is not one of them from which a ton of meal cannot be loaded on shipboard more cheaply than from any common point in Texas; while from all the Mississippi Valley the rates are but little more than half of those which you pay for shorter distances. And this injustice is emphasized almost to the point of insult in the fact that Texas railroads haul Arkansas meal entirely across the state to a Texas port at a lower rate than is chrged to Texas mills for little more than half the distance. And the commercial paradox is presented that Texas, with her 400 miles of coast, and four ports bidding for maritime business, pays more to load a ton of meal on shipboard than either Tennessee or Arkansas from their mills, 400 miles from the seaboard. Nor does the injustice stop here, for, as you know, in the German markets Texas meal commands a premium based upon its higher percentage of nutritive elements, and heretofore all meal shipped from a Texas port has been to the German buyer Texas meal. But the shipment of other and inferior meal from Texas ports, even though it may not be offered as "Texas meal," is rapidly and must soon entirely destroy confidence in the Texas product and eliminate the premium for it.

I am not prepared to charge that this Arkansas meal shipped on Texas bills of lading has been offered or sold as "Texas meal," but the fact that delivery in unbranded sacks has been frequently made a condition of purchase, points strongly in that direction and arouses that suspicion. This is a matter of grave importance, and I trust will have your earnest investigation, and that some means will be found of preventing it in the future.

A matter of no less importance, now especially prominent by reason of certain recently enacted laws, is the question of insurance. It has long ceased to be a secret that very many of the insurance companies, adhering strictly to the exorbitant rating of the Texas Board on policies written through Texas agencies, are ready and willing to take the same risk at greatly reduced rates of premium when offered them through foreign agencies. Could there be more positive evidence that the Texas Board rates, even in the eyes of the insurance companies themselves, are too high? But for this at least the remedy is in your own hands, and it lies with you whether you will apply it. A plan will be presented to you during your meeting here for the formation of an insurance company among yourselves that can but prove at least the instrument of securing for you more equitable rates of premium, and I trust that it will meet with your approval, and in its present shape or pruned and improved by your suggestions, will at once be launched into active and useful existence.

Another matter which should have the constant effort of this association and its members is the upbuilding of a home market for your products. In the export markets you compete with all the world, and the rapidly widening area being devoted to cotton culture in other countries warns us that that competition is every day becoming more intense. The effort has already been made to exclude your oils from the French markets in favor of French-made oil from Egyptian and Indian seed, while a strong element among the German lawmakers is every year looking with growing disfavor upon the continually increasing imports of your meal.

That an immense area of Russian territory is available for cotton culture and that a successful beginning is already being made in it, not only in the production of the cotton, but also in the manufacture of oil mill products, is no longer an experiment. Mexico, once a greedy buyer of your oil and only a few years ago entering upon the manufacture of cottonseed products in an experimental and primitive way, already boasts her half dozen mills backed by unlimited capital and among them the model mill of the continent in point of excellence of equipment and economy of operation, and her cake improved by American methods and American machinery, meets yours in the German markets, landed there from interior mills at a lower rate of freight than you can command from the Texas seaboard. And that from under the smoke of Dewey's victorious guns there may not blossom cotton fields whose products will rival yours, who can say?

But your home market, like the poor, "you have with you always," and at the door of every mill in Texas lies the market that should have the first care and the best effort, but is frequently most neglected. With a fund created for that purpose and properly expended, much could be done by this association in disseminating useful information among our own people concerning the actual value of our products, and through this in cultivating a demand for them at home. Your individual and collective influence should be brought to bear to demand of our state a proper recognition of the importance to the people at large of the industry you represent, and to see that through the Agricultural Experiment Station, and the Agricultural Department of our State University, there should be taught a better acquaintance with the proper uses of the products you manufacture.

The benefits to be found in the successful realization of these efforts are incalculable. Every ton of meal consumed at home not only means one ton less to be competed with abroad, but it means the increase of a trade that cannot be taken away and is not dependent on the whim of the transportation lines. It means a return of fertility to the soil and a consequent increase in the supply of raw material and an aid to a general prosperity in which we must all share.

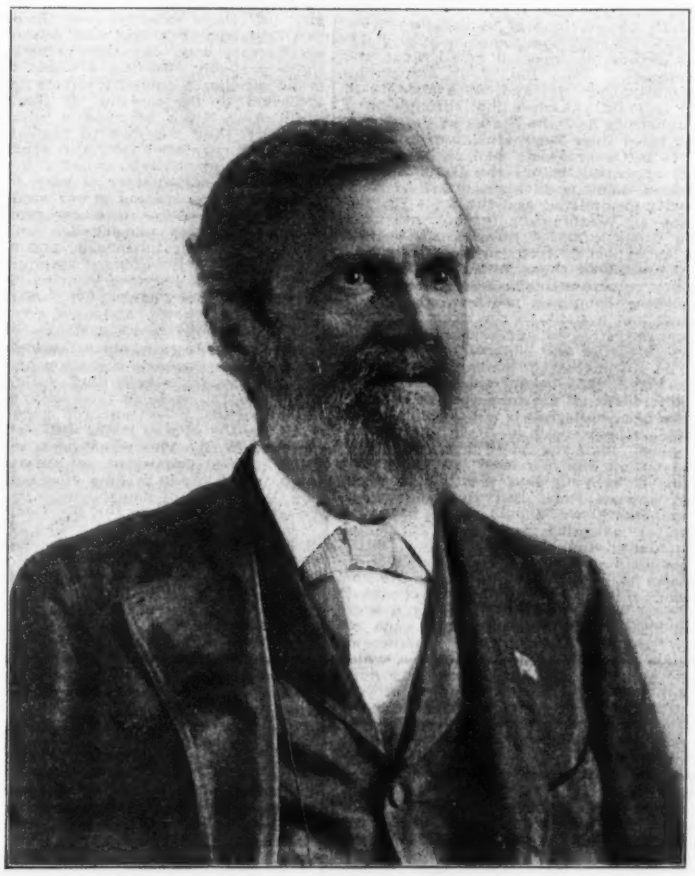
The subject is a broad and important one, and can only be touched upon here. But I trust that before this meeting closes some means may be found of putting within this association the power to do some part of the work demanded in this vitally important field.

Just so it should be your unceasing care to watch with vigilant and jealous eye any attempted control of the sources of supply of your raw material or of the markets for the disposal of your products.

This is pre-eminently an age of combinations and centralizations in commerce and in manufacture. As long as these combinations are confined to the legitimate purpose of eliminating unnecessary expenditure, and in bringing the buyer and seller more closely together, this is not to be regretted. But that combination which by reason of an extended field of operation can afford to purposely make for any period of time any one section of the field unprofitable is paralyzing to individual effort and deadly to individual success. So, too, if from the magnitude of the transactions involved or the limited number of the sources of original supply or other cause, a combination effecting any interest is possible, those dependent upon that interest may be quickly and dangerously affected.

Yours is a business in its very nature particularly vulnerable to the attacks of combinations of both of these classes. Already changes almost revolutionary in their character are taking place in the methods of handling and marketing the raw material upon which your business depends, and the air is full of rumors as to opportunities that these changes will offer for combinations dangerous to you. The domestic buyers of your products are necessarily few in number, and allied by kindred interests in other fields of operation, and should the efforts being continually made to obstruct your export outlets prove in any measure successful, would be quick to see and act upon a combination among themselves adverse to your interests.

The dealers in and producers of your principal supplies operate in a field of such limited area as to their supplies of raw material and points of original dis-



SECRETARY ROBERT GIBSON.

Col. Bobert Gibson, of Dallas, Tex., the efficient secretary, began his career in 1877, with J. V. Lewis & Co., of Cincinnati, O. Leaving there soon after he went to Texas and engaged in the erection and operating of cotton-seed oil mills. For several years past he has been both secretary and treasurer of the Texas Association, and when the Interstate Association was formed he was elected secretary of that also. Mr. Gibson is the right man for the place and has done valuable work for both associations.

tribution that it would be but a moment's work to effect a combination that would mean loss amounting almost to disaster to you before you could find and apply the remedy.

In the industrial field, and under legitimate competition, you have nothing to fear from the already moribund corporations once seeking to dominate this business and now desperately struggling to support an inflated capitalization by statements ingeniously prepared for the benefit of the stock markets. Top-heavy with enormous head office expenses and weighted with incompetent officials at high salaries, owning no actual interest in the properties they manage and without actual experience in, or knowledge of, the business they assume to control, and even without the ties of affiliation or citizenship in the country in which they operate, their doom is already written and your advantage in manufacture is attested by their continually decreasing importance in the trade and annually contracting field of operation.

But in these very conditions, without the protection of the law may lie your greatest danger. The continuance of your safety lies, therefore, in the rigid enforcement of the laws already enacted, restricting and guarding the operations of such combinations, and in seeing that as they may from time to time become necessary others are, under your inspiration, intelligently framed and actively enforced.

In conclusion, let me urge upon you the importance to it and to yourselves of using the association more constantly. You are fortunate in having a secretary able, willing and constantly accessible. The long-distance telephone puts nearly every member in ready reach of him at all times. His long experience in the business, his intimate acquaintance with the men in it, his constant contact with the buyers of products are all at your service at all times. A question asked may frequently solve a difficulty or save you money in the markets, and it needs no word from me to assure you of his ever-ready willingness to assist you.

That you will during the coming season need this and all the assistance you can command, I do not believe any one who reads "the signs of the times" can question. The season just closed owing, as you all know, to the misfortunes of our brother crushers in Arkansas and east of the Mississippi river and not to any inherent quality of your business, has been to Texas mills one of unusual and unlooked-for prosperity, and this prosperity is bringing its customary fruit. Now mills are projected all over the country and many are actually built. These mills must seek their raw material from the same fields that have heretofore scarcely afforded you a supply, and must market their products to the same buyers whose wants you have been easily able to fill.

The laws of supply and demand are as inexorable in yours as in all business. It is said that in Texas alone the crushing capacity already amply sufficient for the raw material available has been increased about 30 per cent. The best authorities tell us that the cotton acreage has been decreased nearly 20 per cent., and that this decrease is permanent. With these facts before you, it requires no more than ordinary business reason to forecast that the season before you will be one which will require all the intelligence your possess, with much of the caution and conservatism you are so generally credited with lacking, to avoid loss, if not disaster to your business. Let us, then, while there is yet time, learn a lesson from the past, take counsel for the future, and at this meeting take such precautions as will help us over this most crucial period of our business.

Thanking you and wishing you an agreeable and instructive meeting and a thorough enjoyment of the delightful trip which is afforded you at its close, I have the honor to declare the convention ready for business.

What is the pleasure of the house?

The president's address was greeted with applause.

On motion of F. H. Bailey reading of the minutes of the last annual meeting was dispensed with, and Secretary Robert Gibson read his annual report, which was replete with matters of deep interest to the association. The report follows:

Address of Secretary Robert Gibson.

Mr. President and Gentlemen: After a year of successful operation of both the association and the mills belonging to it, we are called together to celebrate our fifth annual meeting.

Without egotism, I must say we have accomplished much for the good of every cottonseed crusher in Texas, and saved them hundreds of thousands of dollars. If you remember, at our last annual meeting, the mill managers were in great trouble over threatened increase in freight charges and handling of our products at Galveston. At that meeting committees were appointed who addressed communications to the heads of departments of the railroads, wharf companies, steamship companies and others interested in proposed changes, with the result of bringing them together with us in Austin, where they met us as fair business men should, and when we showed them the hardship such changes would inflict on our milling business entered into an agreement satisfactory to us, which together we carried to our State Railroad Commission (a great, good and just institution whose aim is to do justice to all parties and classes of business in our State), who adopted and promulgated our agreement, giving us the relief asked for, and continuing our established custom for handling our exports through that port.

With these troubles settled, we were confronted with threatened increased duties on our oil imported into France and Germany. This, too, your association promptly took up, and, with the aid of the Interstate Association, through their members in half the States in the Union, interested their Representatives and Senators in Congress, as well as by personally appearing before the Hon. John A. Kasson, Minister Plenipotentiary of Reciprocity Committee, and the State Department at Washington, giving statistics and other valuable information bearing on our export oil trade to those countries, which enabled them in their official capacity to at once cable our Ambassadors to those countries protests, that were heard and heeded, to the effect that this great injustice to our crushing industry was thwarted and enabled our exporters to do an increased business over other seasons in those countries.

Other benefits too numerous to mention have been undertaken and accomplished; suffice to say, we have been kept busily engaged fostering your interests. Your association has increased in membership from 45 at your last meeting to 68 at the present time. But this is not the membership we should have with the number of mills and those furnishing machinery and supplies in our State. Through our office we are striving to increase this membership, but to do this successfully we should have the earnest support and active aid of each and every one associated with us; with such we can easily increase our membership double or treble its present number, which will insure us a revenue not only sufficient for the proper maintenance of your office, but insure us a fund, to be held in reserve, to be used when emergencies offer, not only for the protection of our industry, but to open channels of trade for the further uses and disposition of our products. In this particular, good and useful missionary work can be done that will greatly enhance the value of our output. How? By a freer use of advertising what we have, and to what uses it can be put. As our business is now conducted, we have only a limited field in which to dispose of what we produce. This can be improved on by a more systematic effort on our part to introduce our products in channels of trade not now used; a committee of active working members to take this matter up could certainly devise ways and means and accomplish much good. Certainly it would seem, with the constant increase of our crush of cotton seeds, and mills to crush them, we should do something to enable us to dispose of this increase in a way that will be remunerative to those engaged in the business, and not stop idly waiting, Micawber-like, for something to turn up. We must be up and doing and take care of ourselves. There is no branch of manufacturing in which there is as much money used in its prosecution as ours, where there is such a want of cooperation by those engaged, not only producing the manufactured products, but as well in the gathering of the raw materials for their production.

We should gather in our office information about markets and prices of oil, cake, meal, linters, hulls and ashes, to be distributed to our members once or twice each week by circular letter and by long-distance telephone (which we have in our office) whenever called for. To urnish this information successfully we should be able to get market reports from the principal markets in which our products are sold as often as possible, daily if we could afford the expense. Then when called for your secretary could give you information that would be of value to you in your business.

Another, I think, very important matter for your consideration is that your business is steadily growing, and you should, as soon as possible, establish systematic rules and regulations for its successful prosecution, fostering all its legitimate interests by the making of rules for the government of sales and deliveries of your products that will be fair and just, both to the buyer and seller and acceptable to both sides, with the establishment of an arbitration committee, where, if any differences arise between them, they can be fairly arbitrated and settled in a satisfactory way. Possibly, to make this move perfectly effective, I would recommend sending a committee from this association to the meeting of the Interstate Association to meet a committee from it; they together to perfect such rules and regulations for the conduct of business and settlement of differences that will be satisfactory to both associations and those trading in our products.

The matter of fire insurance protection I leave for your consideration and solution. It is most important, and I hope may be productive of good results. I believe we can do our own insuring as safely as lid-line companies by properly organizing companies, and at a great saving to our mills in its cost.

I beg leave to call your attention to the want of a systematic collection of statistical information regarding your growing industry, such as the crush of seed in proportion to cotton crop grown, the yield per ton of seed in the different products produced. This would seem to me to be the most important information for each one of you in making your estimates for the conduct of your business in a satisfactory way. Then for the further information you need as to stocks of oil on hand and that shipped and accumulated in domestic and foreign ports, you must rely on some reputable paper engaged in that business, such as the Oil, Paint and Drug Reporter of New York, which sends out weekly as full and accurate reports of our cotton seed product markets, domestic and foreign, as is possible to get, together with full reports of shipments of our oil, cake and meal from each of our export ports to all markets of the world. And I wish here to extend my thanks, and of our association, to the proprietors of the Oil, Paint and Drug Reporter, for the many courtesies extended, through me, to all those engaged in the cotton seed growing business, and to recommend to this association the selection of that paper as its "official organ." Mr. Louis K. Bell, who expected to be with us, is their official representative, than whom there is no one who takes greater interest in our welfare or who labors more assiduously in gathering for us information that is of vast importance and great value to each and every one however engaged in our business.

There is another matter I would like you to consider—whether it is to your interest to publish, in some daily paper, an official market report of cotton seed products and the market price of cotton seed? The Dallas News, that reaches almost every oil mill and gin in the State, undertook this for us a year ago, but for some unknown reason some of our members objected to it, hence our discontinuing it the past season. To me such a publication, it seems, would be to the interest of the oil mills, ginners and farmers in giving correct information, by which the latter can judge whether they are getting the full value of their seed. We have nothing to hide from them; in fact, our interests are identical, and the success of each mutual, particularly now that we are assailed by the combinations now formed and being formed in the way of gigantic trusts for the combined purpose of controlling all branches of legitimate business, both in output of production, as well as prices of same; and, as I see it, it behooves us all to prepare most effectually in every way to resist the threatened encroachments of such monopolies, especially on the most valuable productions of our section—cotton, cottonseed, oil mills, ginneries, and, in fact, every trade interested in their welfare and continuance in a free and untrammelled prosecution of their business.

We are not lobbyists, but, if necessary, we should be prepared to join together in strong and influential bodies and go before our legislative councils, both State and national, and by every means in our power combat this great and growing evil, against which the whole world is crying out in desperation and seeking deliverance from same through the lawmaking powers of our State and nation. We in the South, and particularly in our great Texas, have as much to fear from the threatened destruction of our cotton-growing industry, and its kindred branches in all their ramifications, as those in the older and richer States, who are so lustily crying out for help and the protection needed.

I would advise the revision of our constitution and by-laws, with such changes as needed and the issuing of a new edition.

Trusting you will pardon this curtain lecture of mine, given with the very best intentions, though, as I conceive it, in the line of my duty as custodian of your interests, through your association, I will close by calling your attention to the fact that we have your two offices fitted up comfortably, with an extra desk for the accommodation of each and every one of you, and you can't conceive the great pleasure you will afford your secretary by calling whenever in the city and swapping experiences (I hope mutually to the interest of both).

And if favored with a continuance as your secretary I promise to do my utmost to make your visits pleasant and serve you to the best of my humble ability.

The report of Treasurer Marion Sansom showed the financial condition of the association as follows:

Balance on hand Aug. 3, 1898	$158.05
Total receipts from secretary to June 6, 1899	1,756.30
Total	$1,914.35
Total disbursements	1,769.06
Balance on hand	$145.29

This report was referred to an auditing committee appointed by the president as follows: Messrs. Holstein, Landa and Slaton.

President Allison called attention to the presence of a number of insurance men, and said he was glad to see so many present, explaining to the association that he had taken the liberty of inviting them to be present that they might hear what was said on the subject of insurance.

R. L. Heflin, from the committee to which the arbitration resolution offered by W. I. Yopp at the last meeting was referred, reported adversely, but recommended that at the beginning of each year the president appoint a committee of 13 members, three of whom may be designated by the president to consider

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and pass upon all controversies arising within the State, the expenses to be paid by the loser.

Mr. Sansom moved adoption of the report and Mr. Heflin moved that the resolution recommended be incorporated in the rules of the association. Seconded by Mr. Scales.

Mr. Sullivan thought there should be an arbitration committee from this association to meet a like committee from the Interstate Association and form a general arbitration committee.

Mr. Scales said that the president had some correspondence with the president of the Interstate Association which had not been satisfactory.

President Allison explained his correspondence with President Haskell of the Interstate Association, but said he felt sure no discourtesy was intended in Mr. Haskell's reply, which was an intimation that the Interstate Association could attend to its own business and a suggestion that the arbitration matter be left for later consideration.

Mr. Sullivan favored appointing the committee and Mr. Brode said he was certain no discourtesy to the association was intended by Mr. Haskell.

Mr. Sansom said relief through arbitration was needed at home and that was provided for in the report.

Mr. Erwin said he thought a satisfactory solution could be reached by sending a strong delegation to the Interstate convention.

Mr. Bailey said Texas' interests demanded that some action be taken and the adoption of the report did not put this association out of line with the Interstate.

Mr. Scales said three-fourths of the product of Texas mills is sold to govern transactions in Texas.

The committe report was then adopted.

Mr. Sullivan moved the appointment of a committe on arbitration to meet a like committee from the Interstate Association.

Mr. Harry Landa thought the selection of this committee should be postponed until it was known who would attend.

Mr. Sansom thought the best plan would be to appoint a committte to present the matter to the Interstate Association and recommended the appointment of a general arbitration committee.

Mr. Fichenberg thought the Texas association could look after its own affairs. Prest. Allison called W. D. Kyser to the chair and took part in the discussion, saying that at its last meeting the association authorized the president to appoint a committee to confer with a similar committee from the Interstate Association. That President Haskell in reply to his letter had suggested that the matter be left for the next meeting. He did not think the matter could be again taken up without compromising the dignity of the Texas association. He had no war to make on the Interstate Association but thought the case rested with it and it should be the first to move to renew the proposition so far as he was concerned he would decline to do anything in the matter unless plainly instructed by the association. This announcement drew applause from the members.

Mr. Landa favored harmonious action, and after further discussion participated in by Messrs. Sullivan, Hetlin, Brode and Allison, the motion was adopted with the understanding that the committee was to be made up from those attending the Interstate Association and for the purpose of representing the Texas association at that meeting.

A recess was taken for the enrollment of new members, and the following were enrolled:

Rockdale Cotton Oil Company, by B. Lowenstein; Munger Oil and Cotton Company, Mexia; Pittsburg Cotton Oil Company, Pittsburg, Texas; Italy Cotton Oil Company, Midlothian Cotton Oil and Gin Company; McGregor Cotton Oil Company, S. A. Cavitt; Celeste Oil and Cotton Company; Pilot Point Cotton Oil Company, G. E. Light, president; The Lamar Cotton Oil Company, Paris, F. H. Bailey, secretary and manager; Greenville Oil and Cotton Compnay, J. B. Dale, at Greenville and Sulphur Springs; Cooper Cotton Oil Company, W. T. Jackson; Whitewright Cotton Oil Company; Merchants and Planters Oil Company, Houston, by Henry Oliver; J. M. Winship, New Orleans J. G. Falls & Co., Memphis, Tenn.; Humphreys, Goodwin & Co., cotton seed products, Memphis, Tenn.

The first session, held on Monday, was largely taken up with a consideration of trusts, and resolutions condemning the same were passed. The resolution was introduced by Marion Sansom, of Alvarada and seconded by R. L. Heflin, of Galveston. There was little discussion of the resolution and those who discussed it, with two exceptions, favored its passage, the two adverse speakers objecting only to the clause pledging support and indorsement to the anti-trust act. When the vote was taken, however, there were no negative responses and the resolution was adopted unanimously. Following is the full text of the resolution:

Whereas, It is an age of combinations and centralization in commerce and manufactures, and

Whereas, Many of these combinations are dangerous to the interests of the people and hurtful to the country,

We, the members of this association, in convention assembled, do most solemnly affirm our opposition to such trusts and combinations and declare it is no part of the purposes or objects of this association to in any manner attempt to limit, fix, discuss or control either the price or manner of buying and selling either the raw material or manufactured product in which we deal. But that this is merely an aggregation of manufacturers seeking by mutual counsel the best and most economical means of manufacturing and opening up demand and new fields and markets for the products that we make, devising ways of educating those not now using our products as to their value and how to use the same, and to inform ourselves of the demands for improvement in same by others, which as individuals we could not so well do.

And this association hereby pledges its earnest support to the anti-trust laws of this State, which it indorses and approves.

During the discussion of the arbitration question the Texas association asserted its dignity and decided that any further advances toward a plan for an interstate board of arbitration must come from the Interstate Association, the proposition made by Texas for the formation of such a tribunal not having been considered by the interstate people. The Texas Association, however, empowered the president to appoint from among the Texans who will attend the Interstate Crushers' Convention a committee to represent the Texas association.

When the convention resumed work the resolution offered by Marion Sansom against trusts, etc., fully set out at the opening of this report, was read. Motion to adopt was seconded by R. L. Heflin.

Mr. Scales thought the reference to the anti-trust law should be omitted.

Mr. Heflin said the object of the resolution was to let the public know where this association stands and what are its purposes and objects, and these were covered by the resolution as read.

Mr. Sansom said he did not think the association could afford to say it did not approve the anti-trust law, as it had been charged both in the House and Senate that this organization was one of the gigantic trusts operating in Texas. Members here knew the charge was not true; that the association is opposed to trusts, and he thought it had as well speak out. The anti-trust law don't hurt the association, and its members are really in favor of it.

Mr. Holstein said he did not approve the anti-trust law, thought it a piece of damogogy, and he did not want to be committed to an endorsement of it.

Mr. Scales said he didn't think this sort of discussion should occupy the association.

Mr. Bailey said he favored the law and wanted to see the resolution adopted.

Mr. Erwin thought the intent of the resolution good, and favored its adoption.

Mr. Sansom thought it was a good law, good for the people of Texas and good for the association.

The resolution was adopted amid much applause.

Mr. Bailey read the report of the Committee on Bags and the convention adjourned until 2 p. m.

When the association reconvened after lunch President Allison read notes and telegrams of regret from J. M. Winship, New Orleans; Foos Manufacturing Company, Cincinnati; S. Samuels, Marlin, and Milo F. Lawrence, Kansas City, all of whom had expected to be present at this meeting, but were prevented by unforeseen circumstances. Mr. Lawrence wrote that he expected to be able to reach San Antonio in season for to-day's meeting for the purpose of presenting to the members of the association a plan for inter-insurance.

An invitation from the San Antonio Club, extending to members of the association and their visitors the hospitality and courtesies of the club, was read and on motion of Col. W. W. Boyd the thanks of the association were tendered to the club.

The regular business of the afternoon was opened with a paper from Mr. R. E. Erwin of Waxahachie, who chose as his theme, "Should the Acreage of Cotton Be Decreased in Texas, and If So, How Will It Affect the Oil Mill Industry?

Reduced Cotton Acreage and Increase in Number of Oil Mills.

BY R. E. ERWIN.

"Should the acreage of cotton be decreased in Texas, and if so, how will it effect the oil mill industry?" was the subject of Mr. Erwin's paper. He said, in part:

After careful investigation, I find that the acreage in cotton has been decreased at least from 15 to 20 per cent., and in some localities as high as 25 per cent. This being true, how will the decreased acreage affect the oil mill industry? In the first place, the crushing capacity has been increased in Texas at least 40 per cent., and the acreage in cotton has been decreased 20 per cent., which will necessarily make our runs much shorter. Competition will be so sharp for seed I fear that there will be a number of us with our balance in the red at the end of the year. There will be so many new men in the business who will think if their neighbors can pay a high price for seed, they can also—a very serious mistake in many instances. We do not always know the circumstances of our neighbors; if we did, we would keep cool and let them fill up on seed at a loss, or to fill some bad contract, which compelled them to have seed.

Why is this business so unsettled? In the first place, we are at the mercy of a strong combination, on whom we are entirely dependent for disposition of our products, which can at will manipulate the oil market and put us in a flutter one way or the other. Again, we are tied hand and foot with an injunction prohibiting us from raising or lowering the price of our products or organizing. Thus our law-makers have decreed, and we will have to abide this injustice. In the near future they will see the injustice of these laws, but it will be too late. The sheriff will have 90 per cent. of us, and others will reap the fruits of our labor by buying our mills for 25 per cent. on the dollar. With all our energy, money and thought we are on the eve of a crisis in our business. If we were allowed to co-operate with each other in selling our products, we could load a ship from our mills; we could make our own press cloth, we could make our bags and get from under a mighty trust, which is sapping the life-blood from our seed raisers. Of course, they have to pay all freights and commissions and stand the necessarily low price for their raw material. We would also be enabled to bring the buyer and seller closer together by being naturally interested in these factories.

With so many new mills and decreased acreage in cotton our products will be marketed in about one hundred days, which will force prices below a profit. We should encourage the acreage of cotton for many other reasons: Texas being the greatest cotton producing state and having a soil that will produce more per acre with less labor than any other state; consequently, we will compel our more unfortunate brethren in other cotton states to go in other lines of business more adapted to their soil and climate. And if Texas will keep raising three and a half to four million bales of cotton per year it will be better for our state, as it will force quickly the other states to change their business. We are just on the eve of better prices for our cotton, for the reason other cotton states have decreased perhaps in a larger proportion than ourselves. Should we fail to keep the acreage as it is and allow it to decrease we will have to turn our mills into other enterprises or let the owls and bats have them for their abode. It will also allow states like Alabama, Tennessee and Georgia to keep the cotton market in a very unsettled condition. I see a very serious problem staring us in the face, and what is best and how to keep our business in a flourishing condition will take wise and conservative action upon the part of every oil mill man in every part of the state.

We must look to other things to increase the value of the cotton crop if we expect to keep it up to its present standard. It has been found by actual experience that one ton of fiber stalk will make 1,500 pounds of jute, and bagging made from this material is pronounced a first-class article and can be used for various purposes. Encourage the consumption of our cottonseed meal and hulls in every way possible and many tons of seed which are now being fed in the country will be exchanged for meal and hulls and thereby benefit both the producer and the manufacturer.

Bring to bear the influence of our association and also that of the Interstate Association upon our representatives in both branches of Congress to use their influence to shorten the distance to Japan and other cotton consuming countries on the Pacific by making a canal at the Isthmus of Panama. Texas being the nearest and

THE LOWRY PRESS

To PLANTERS and GINNERS:

Have you completed arrangements to instal a **LOWRY PRESS** this season?

If not, apply to the ***Texas Planters Company,*** Dallas, Texas for all Texas points; to the ***Tennessee Planters Company,*** Memphis, Tennessee, for points in Louisiana, Mississippi, Tennessee, Arkansas, Indian Territory, and Oklahoma; to the Georgia & Carolina Planters Company, Augusta, Georgia, for points in North and ***South Carolina, Georgia,*** Alabama and Florida.

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has commenced shipments of these presses for this season's use, and there is going to be a large demand for cotton in *LOWRY* bale form.

largest would receive the greatest benefit. There should be a strong effort made to encourage and increase the use of our by-products, and even though cotton is low the seed may become so valuable that they will bring the acreage back to its former basis.

In conclusion, let me advise, first, that the cotton acreage has been decreased three million acres and that Texas has lost at least on million five hundred thousand acres; second, that it is equally true that the crushing capacity of our state has been increased to a very great extent. There is a spirit of rivalry which will be hard to overcome. We are all justly entitled to a reasonable interest upon our investments. This can only be obtained the coming season by being contented with smaller crushes, by keeping cool heads and always remembering there are others; that united we make money, divided we lose.

There was a general and favorable discussion of Mr. Erwin's paper.

Harry Landa said that in oroder to avoid disaster the leaks in the business must be stopped and one of the greatest leaks was the bag question. If the association is to have an insurance company let it also have a bag factory and even a press cloth factory. The bagmen had repeatedly promised payment of drawbacks, but he would like to know if any of them had paid these drawbacks.

Mr. Benjamin, of New Orleans, spoke for the bagmen and told of the trials and tribulations of the bag makers. The delay in payment of drawbacks, he said, was chiefly due to failure to observe government regulations. He said that at his request the deputy collector of customs at Galveston and a custom house broker from Galveston were both here to explain the situation and remove if possible the erroneous prejudice against the bagmen.

Discussion of this matter was dropped for a time and Mr. Woodall read a paper on the subject of the payment of commissions to ginners, as follows:

The Paying of Commissions to Ginners.

BY ED. WOODALL.

Mr. President and Gentlemen: The subject I have for discussion is one with which most every mill manager is quite familiar, and one which quite a number have practiced—that of paying commissions to ginners.

This practice was inaugurated several years ago when there were greater profits in the mill business, and has been a hard one to dispense with.

Te me, neither from a moral nor business standpoint justifiable, and about the only excuse a mill manager can give for doing it is because his neighbor mill manager does it; consequently the evil has continued from year to year, the mills dividing their profits with the ginners. The best reason for not paying the ginner a commission is that it is not right from principle. It is wrong to pay the farmer one price and the ginner another for the same commodity; a mill to do this must either pay the ginner more than the seed are worth, or the farmer less than they are worth. There would be as much justice in making a like discrimination between the price of their cotton, and no one would think for a moment of justifying that. The second reason is that it is not business. The basis of purchase of cottonseed should be as the basis of purchase of any other commodity, viz.—competition.

A mill which gets a greater part of its seed from wagons and which pays its ginners commissions can never secure the cheapest seed.

Because competition makes the price, and outside mills the competition, so the outside mills come into the home mills' territory and raises the price for seed to a price at which there is very little, if any, profit, and the home mill, being in the practice of paying its ginners, whose support and patronage it dare not lose by a contention with them, a commission above the market price fixed by its competitor, often makes the margin so close that it takes the seed at a price that will admit of very little, if any, profit, resulting in the end in financial difficulties and a stampede of stockholders to rid themselves of their stock. The market for seed should be as the market for corn, wheat, cotton or any other commodity; should be governed by the highest market price. Should a grain or cotton buyer go out to buy either, offering to pay a commission above the actual market, he would be ridiculed by his competitors, and end in bankruptcy. A number of mills never indulged in this practice, and quite a number who did have abandoned it, so they are in a choosing position, inasmuch as their price for seed is always a delivered one, as applies to their immediate territory; so they are at all times enabled to pay the highest market price. Mills buying seed on a purely competitive basis, without commissions or having any railroad freights to pay, are in position to always protect their territory, as others will find it difficult to compete with them.

As to the mill paying commissions which is dependent on car seed for the greater part of its supplies, I see no more reason to justify it than the mill which depends on wagon seed, and it is less able to do so, inasmuch as it has to pay freights. So open competition should be the basis in either case. The ginner should be in the gin business for his toll or price he charges for ginning, and it should not be a part of his business to make or divide the profit on seed with the mill. And should this practice be persisted in by both the mills and the ginners, there is but one logical conclusion—that the mills will either have to go into the gin business or out of the mill business, for frequently they cannot make a profit after having divided with the ginner that profit they are entitled to by means of open competition.

There is another practice to which I desire to call the crushers' attention, and one in which quite a number of the mills have indulged, but am glad to say, one which has not become so universal as the payment of commissions—that is the paying of freights to ginners in the country, or rather whose plants are distantly situated from the railroad or mill. There can be no more justification for this than for the grain buyer paying as much for corn or wheat ten miles from the railroad as he would delivered to the railroad. This practice, like the ginner's commission, was inaugurated when there were greater margins than now in the crushing of cottonseed, and, like it, has been a hard one to remedy. The only reason that has been offered for this practice is that when there was quite a deal of uncultivated land the mills frequently became in competition with the cattlemen, who usually bought considerable seed to winter their cattle, and by paying these freights would get a quantity of seed they would not get otherwise; or where a mill has nearby railroad stations, that get a quantity of seed it ought to get by reason of its proximity. In the latter case there is some excuse, but in the former, it is better to let the cattlemen have what seed they want, as they are going to get them anyway, their basis of competition being entirely different from that of the mills, which can only pay what the seed will actually work out, but, inasmuch as the country is now nearly all in cultivation, the cattlemen have ceased to be competitors to any perceptible extent; besides, they have found it much to their interest to fatten their cattle with the product of the mills. These practices are unjustifiable and unbusinesslike, and constitute leakages in the cottonseed oil mill business that ought to be stopped. While they are not approved by many, if any, of the mill managers, still a great number continue them. In conclusion I must insist that the basis must be with the mills, as with other lines of business—open competition—and if they must buy their business, the proper way is to put it in the open price, and pay the ginner, farmer or any one else the same.

"Cotton Seed Hulls" was the theme of Mr. Sullivan's paper, which attracted much attention, and is given in full as follows:

Cottonseed Hulls and Development of Pulp Mills.

BY T. P. SULLIVAN.

Mr. Chairman and Gentlemen of the Texas Cottonseed Crushers' Association:

In conversation with our worthy secretary a few weeks ago, the subject of writing something to read at our annual meeting that might be of material interest in enhancing the future values of our products was discussed. It was suggested that possibly I might evoke from the refuse of the past some few recollections that might be rehabilitated and under new auspices, garnished with newer ideas that naturally suggest themselves to the additional aggregation of individuals who are developing this great industrial field in which we are engaged. It cannot be possible that the trend of our activities is all confined to one channel of thought, viz.: How to advance our individual interests, regardless of the general welfare of the old miller, and the development of the various products that are the factors of our industry. We have encountered some years of phenomenal success that are and will be merely as oases in the years of depression that fonow as surely as night does the day, their cause being accounted for under the caption of overproduction, too many mills, some will say, while others may attribute it to the formation of combined colossal industrials, who use our product and adopt the weapons with which nature provided the wrong to prey mercilessly upon the weak. It is our duty to provide by all known methods to barricade our industry against these upheavals of reverses. Along this line of thought, where values are daily crumbling from causes that seem inexplicable, and where the margin of manufacture is becoming each day so marked and reduced, it behooves every one in our business to look closely with more than magnifying glasses and ascertain what part of his product he can advance and make to produce more substantial results.

I will therefore ask your indulgence for what I fear will be a very prosy article, and will take as my theme "Cottonseed Hulls," as a part of our product and from which possibly some profitable results may evoke, with the limited ideas that I advance your suggestive minds can add a few more grains of thought, something that will assist to restore values from the apparent decline that hulls have been subjected to the past year. The large increase in the number of mills in Texas and the Indian Territory means a very large output of hulls. The query suggests itself, Will the cattle-feeding industry respond and increase proportionately with the excess of hulls produced, so as to keep the price of hulls to the mills up to the value that the mills feel they should be, in order to class hulls as a profitable factor of their products?

To my mind a large surplusage of hulls seems to be the inevitable outcome, and the problem for solution is, How are we to take care of that surplus? We are all pretty well satisfied that the price of hulls to feeders last year was commercially lower than their value as compared with the past and other competitive food rougheners. If we will view the relative prices paid by a majority of feeders last year $2.25 per ton for hulls and compare that with the old method of burning our hulls, I apprehend we will all agree that there has not been that profitable evolution which seems to have taken possession of consumers of cottonseed hulls.

By way of illustrating we will take ascertained facts. It has been practically demonstrated that 2½ tons of hulls will generate as much steam as one ton Pittsburg coal, and two tons of hulls will equal one ton of Arkansas or Indian Territory coal. The cost and freight of coal delivered at Jefferson, Texas, is $4.50 per ton. The value of two tons of hulls at $2.25 is $4.50. From this we deduct the value of the ashes produced from two tons of hulls, which is from 40 to 45 pounds per ton, we have, say, 80 pounds of hull ashes. It is well known that cottonseed hull ashes are much sought for on account of their superior fertilizing ingredients, as well as for the purity of the alkali contained therein. Cottonseed hull ashes are worth $20 per ton f. o. b. mill. This would make 80 pounds ashes derived from two tons of hulls worth 80 cents, making the cost of your fuel, when burning hulls, $3.70, as against coal at $4.50 per ton.

Where your fuel is less than $4.50 per ton, the value of your hulls as fuel will be diminished accordingly.

If you burn slack coal at a reduced price, you must ascertain how much steam, as compared with coal, your slack will produce—say, for example, it takes one and a half tons of slack to generate the same quantity of steam as one ton of coal, the value of that extra amount must be added to your cost of slack and then contrasted with your hulls.

I will now call your attention to the other uses to which I have converted cottonseed hulls, and if followed up would no doubt result in large developments.

In 1886 I had an interview with a paper manufacturer of Lockland, Ohio, engaged in the manufacture of what is called carpet-lining paper. I induced this party to try cottonseed hulls. He was then using wheat and rye straw. He bought a carload and worked them into carpet lining, producing a corrugated board of a most elastic nature when spread under the carpet, the corrugations preventing the absorption of dust in the carpet. He was delighted with his product, and continued to buy the raw hulls for several years. I also introduced them for the same purpose to like mills at Beloit and Appleton, Wis., who continued to use them while we ran the St. Louis. Excessive freight rates would not admit of their bringing hulls from the South. We sold our hulls to these mills for $3.50 per ton f. o. b. cars as an introduction.

During the time I had frequent conferences with Mr. Joseph Sears, of Chicago, a member of the N. K. Fairbanks Company, and one of the most progressive and aggressive promoters of cotton oil products. From these conferences Mr. Sears and Mr. Oliver Burnham, chief engineer in the N. K. Fairbanks Company, patented a machine for taking the fiber or lint from the cottonseed hulls by attrition and abrasion. An experimental plant was erected adjoining the plant of the American Cotton Oil Company, in St. Louis, which I was managing. We perfected the machine, passed the experimental stage, and commenced the manufacture of paper stock from cottonseed hulls.

Mr. Sears and myself visited the large paper mills at Appleton, Neenah and Beloit, Wis., Kankakee, Ill., Ypsilanti, Mich., Holyoke, Mass., the mills in Connecticut, New York and Philadelphia. All of them were anxious to try the stock, but didn't understand its treatment or manipulation.

We employed a practical paper maker who thoroughly understood how to use it and had him travel and introduce it in all the mills in the Miami Valley, Massachusetts, Connecticut, New York, Philadelphia, Wisconsin and Michigan. About thirty paper mills in this country used one carload or more of our fiber, and some are using it still, though not of our make.

We demonstrated that is was the finest stock in existence for making blotting paper, being more absorbent than any other stock, also for mixing with other stock for making writing paper; in fact, when in a bleached state it is the great competitor of Norwegian chemical wood pulp, worth $70 to $80 per ton. We flattered ourselves in having established our cotton fiber paper stock with the paper mills of this country and Scotland, giving them a competitive material as against rags and expensive wood pulps for the manufacture of paper.

The great obstacle to its permanent adoption was the fact that machinery and appliances for the successful treatment of the fiber were not alike in all the mills, and possibly the skill of the manipulators was not of equal grasp, hence a prejudice

JAMES M. ADAMS

EXPORT COMMISSION MERCHANT,

COTTONSEED PRODUCTS,

4 Stone Street - - - - NEW YORK

was being developed by a great number of the mills to its continued use, owing to the loss in bleaching, etc., arising from the causes above mentioned. All of them, without any mental reserve, will say, if you offer us the bleached stock in the shape in which your expert has shown it could be made, we will buy all that is offered of it. In our process of manufacture at our St. Louis plant, we produced from one ton of hulls 25 per cent. of paper stock or fiber and 35 per cent. of cleaned hulls. This 65 per cent. of cleaned hulls derived from one ton of raw hulls we disposed of by packing them into cental bags of 100 pounds each, the same as we do cottonseed meal, and sold them to Nelson Morris & Co., S. W. Allerton & Co. and others who were feeding cattle with distillery swill at Louisville and Uniontown, Ky., and Lawrenceburg, Ind., for which we received $2.50 per ton f. o. b. cars, sacks returned free of charge, their rate of freight being $2 per ton.

We made two kinds of hulls. Some we ground very fine and bolted. When ground it resembled linseed meal in appearance. We sold this ground hulls meal in bags of 100 pounds each at $11 per ton f. o. b. cars at Chicago, some we sold in St. Louis as a fertilizer mixer for $8 per ton and several carloads went to Baltimore for a like purpose. We also mixed these fine ground hulls with cottonseed meal in the proportion of one and four, which we designated cottonseed meal bran, and sold it as a combination food, which we sold in competition with wheat bran, and it showed an analysis of 14.18 albuminoids, 67.28 carbo-hydrates and 5.44 fat, as against 11.72 albuminoids, 44.66 carbo-hydrates and 2.58 fat in wheat bran, thus showing that it contained more of the ingredients of nutrition than wheat bran

We were introducing this bran successfully to feed stores throughout the city. We have also mixed our cleaned ground hulls and cottonseed meal in the proportion of 55 per cent. meal and 45 per cent. hulls, packed 100 pounds in cental bags, selling it in New England as English meal at a valuation of $3 per ton less than the straight meal. I understand this part of the business is still kept up by a party in Memphis, whom, I fear, used our thunder after we retired from the business. The English cottonseed meal, as you no doubt understand, ground from their cake, represents 55 per cent. of meal and 45 per cent. of hulls.

Since my advent in Texas I have been in correspondence with a gentleman who assures me he has discovered the philosophers' stone; he is a practical chemist in the paper manufacturing line, and was experimenting on all kinds of fiber at Albany, N. Y., when we were introducing our fiber in Holyoke and New York. This gentleman claims that he has perfected digestors and machinery for the successful treatment of the raw hulls and their conversion into as good stock as the lint separately. As stated, the great loss the paper makers encountered in the working of our stock was the waste of alkali. This waste he is prepared to overcome by reclaiming the alkali. He gave me an estimate on the probable cost and working of a small plant that would work up, say, twenty-five tons hulls per day, or the product of a sixty-ton mill, viz.: Cost of boilers, digestors, tanks with reclaiming plant and other necessary machinery to work twenty-five tons per day will cost about $28,000. Using hulls at a cost of $3.50 per ton and coal at $2 per ton makes the cost of working twenty-five tons hulls and producing six tons bleached fiber at $222.50 per day. This bleached stock is worth in New York $70 per ton or total of $420, from which deduct cost $222.50, leaves results $197.50; from this take freight from St. Louis to New York, 32 cents, $38.40; leaves net value, twenty-five tons hulls, $159.10, or $6.36 per ton, after allowing $3.50 per ton for them originally. This may be overdrawn, but the party is a practical paper maker. I would make very liberal allowances from these figures as experimental and actual results sometimes take a wide range of fluctuation.

In the foregoing facts and figures I have endeavored to give you the possibilities of value and usefulness of cottonseed hulls, and I trust that our sphere of observation may be so enlarged that the outlet for this part of our product may not be circumscribed.

Texas to-day offers the greatest opportunities for the erection of pulp mills and the development of pulp made from cottonseed hulls and its conversion into blotting and the other kinds of paper to which it can be most profitably adapted. If a mill in Scotland, the largest manufacturer of blotting paper in the world, could come to St. Louis and purchase 300 tons of cotton fiber paper stock in one order at a net price of 1½ cents per pound f. o. b. cars, there certainly ought to be a profit in it in the very seat of its production. If men in the Northeast and Northwest have become multi-millionaires by the operation of wood pulp mills from their hewing down the forests and hauling that timber to their mills for reduction to pulp, what a vast possibility exists in Texas, where this raw material is within the reach of so many without the effort that is expended by the Northern millionaire manufacturer.

We must seek diversified outlets of consumption for all our products, and I know of no field of investigation productive of more good results than the establishment of pulp mills for the absorption of our cottonseed hulls. Stock companies could be formed at various points adjacent to several mills, where each mill would be an interested participant in the profits derived from working up their surplus hulls.

President Allison said the subject was an important one and should have the earnest attention of the association.

On motion of A. P. McCord a committee was appointed to investigate the practicability of utilizing hulls as suggested and the president appointed Messrs. Landa, Kyser, Dale, Oliver and Loewenstein, saying he hoped the investigation would be thorough.

A paper on freight rates, prepared by H. L. Zeigler, of Galveston, was read by Carl Eichenberg, who followed with a paper of his own in which he discussed the quality of bags and methods of shipping. These papers are here given in full:

Better Freight Rates for Interior Mills Was His Subject.

BY H. L. ZEIGLER.

Our president has requested me to furnish my fellow members a paper on the subject, "What can we do to secure better freight rates for interior mills?" or some kindred subject.

The rail lines have established Galveston as the basing point on your through rates, its location has demanded it, it will exist as long as rates to Galveston are lower than to any other port, and the rail lines should be forced to maintain it as long as the present conditions exist.

You should constantly bear in mind that Galveston is your home port and basing point, and if rates to and from Galveston are kept in line you are assured of favorable rates to all ports and all markets.

Under normal conditions your rates are less via Galveston, yet under the stress of competition the rail lines to other ports may make a through rate less than the sums of locals through Galveston; this should not be with the consent of the Texas cottonseed crushers.

Freight rates by rail should be closely followed, and the rail lines furnished with data showing conditions existing at competitive ports; when such ports offer a lower basis than obtainable through Galveston, you should not depend on the Galveston rail lines or the Railroad Commission of Texas discovering these unfavorable conditions, but should at once take steps to bring it to their attention; Galveston should always be in position to make you as low or lower rates than any other port.

Steamships can be operated as cheaply to and from Galveston as any gulf port, and the rail lines should not be allowed to discriminate against her; if prevented from doing so by you the ship owners and ship agents will protect you with rates and tonnage to every port and market. Let me take this opportunity to state you will be offered a greater variety of tonnage at Galveston than you enjoyed in the past.

The conditions surrounding exports apply equally to imports, and you should force the importation via Galveston of all your purchases. This will enable the steamstips to earn a revenue on their voyage to receive the exports, it will bring about a reduction of the export rate, for the reason that ship owners figure on the earning capacity of the steamers' round trip. It is true that the railroads do not make favorable rates at present on imports, but you can depend they will make the rates necessary when the freight offers. They realize more than you do the need of freight for the empty cars they haul back.

My paper is of great length; however, I ask your attention to the following, which is by no means the least of the ways to secure better rates:

Concentration of freight brings cheaper rates, and for this reason you should place your business in as few hands as possible, constant inquiries from many shippers and sources, tend to create the impression that there is a large quantity of ready freight to move, and the ship agents accordingly hold for firmer rates; do not mislead yourself in the belief that steamers will be chartered on your inquiries; the crop and its needs are known; your inquiries only give the impression that freights will move ahead of time.

When a steamer is offered for berth or charter, something definite must be promptly known, or the ship agent finds it necessary to send an expensive telegram to many shippers without knowing who is in the market for the position of the steamer, which expense is added to the rate or the rate must be advanced to cover the speculation of taking the steamer without cargo in hand; or, you wire several agents at considerable expense to both yourself and ship agents, many of whom are not in position for your shipments or the quantity of freight you offer is not enough of its kind; there are many other arguments for concentration.

My experience as a freight broker is: The exporter long on freights is at a disadvantage. Freight room should not be contracted for expect to cover actual sales. Do not wait until the last moment to make your engagements, room cannot always be had, besides it might be known you must have the room.

The freight broker is constantly in the market and knows when room is scarce or plentiful, when new steamers are put in the market, to what port these steamers are going, what is being engaged and at what rates, and he is able to give you prompt replies to your inquiries.

The ship agent does not know for whom the broker wants rates, whether for local

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or interior shippers, and for that reason quotes the bottom of the market, nor does the broker disclose his many inquiries and excite the market.

Possibly you may think I am arguing solely from self-interest. Let me suggest that you ask the cotton shippers what they think of freight brokers; go to the railroads and find out if their engagements are not growing less year by year; inquire of freight brokers at the older ports, they can be found at all of them, not in numbers, but usefulness; I represent a firm of brokers with offices at many ports of the world; they have at New York ten men doing their booking who are assigned to various branches of the business, none of them competing with his fellow clerk, thereby maintaining the advantages of concentration.

Above all things, I want to impress you to make offers of what rates you can pay; if a lower rate is to be had you will get it. You must not only seek reduced rates, but seek the lowest rate prevailing and a saving in doing so.

The Shipment of Cottonseed Meal.

BY CARL EICHENBERG.

To the President and Members of the Texas Cottonseed Crushers' Association:

Your president, Mr. Allison, requested me to read at your meeting a paper upon the question whether it pays the Texas cottonseed crusher to bolt and ship cottonseed meal in 75-kilo bags. In prompt reply to this, I pointed out that it is impossible for an exporter who is not at the same time a manufacturer, to deal with this question exhaustively, because, to answer it correctly in all its phases requires an exact knowledge of the difference between the cost of grinding meal so finely and bolting same, and the cost of manufacturing a common prime meal, and also of the difference between the cost of large 75-kilo bags and of 100-pound bags. A manufacturer who bolts and puts up cottonseed meal in 75-kilo bags should be better enabled to handle the subject. Nevertheless, in compliance with Mr. Allison's renewed request to treat the matter to the best of my ability, I respectfully submit the following, which is mainly based upon such facts as presented themselves to me during my many years' dealings with the German buyers and consumers of cottonseed meal.

In fact, bolted meal in 75-kilo bags has been exported so far exclusively to Germany. As is well known to almost every one in the trade, many years ago only inferior qualities of American cottonseed meal, coarse of grinding and frequently insufficiently decorticated and delinted, came into the German market. The German mills then undertook to regrind this meal, or to grind cake and extract every bit of fiber and hull, and so produced a meal almost as finely ground as flour and of a beautiful, even color, which they put up in bags of 75 kilos.

At the same time the report was circulated, to all probability mainly by these interested German mills, that the American meal, if not reground and freed of all fibers and hulls, was injurious to cattle, and they were sustained in this argument by some influential agricultural professors.

At the usual annual conventions of the stockmen, where all kinds of feed were exhibited, the difference in quality between the various kinds of cottonseed meal was conspicuously demonstrated—on the one side the so-called German reground meal, free from all fibers and hulls, and on the other the lowest qualities of American manufacture. As an argument most specially designed to deter consumers from buying American meal, all kinds of impurities and articles, which were said to have been removed from American meal in regrinding, were shown. For instance, a good deal of lint, hull, pieces of wood, nails, etc. All this caused the German stockmen to assume an antagonistic attitude toward American cottonseed meal, and indirectly forced the importer to regrind the American product to a large extent and bolt it before selling it to the trade. In this way a very fine quality, almost as fine as flour and free from lint and hulls, was obtained, and, of course, it was put up in bags of German weight. The extra cost of the regrinding and of the new package amounted to amout $2.50 to $3 per long ton, and placed the value of the German meal so much above that of common American prime meal.

The high premium paid for the German bolted and finely ground meal induced first the Merchants and Planters' Oil Company, at Houston, Tex., about six or eight years ago, to produce a meal almost equally as fine as the German reground meal, and to put it up in 75-kilo bags, German weight. For this meal the Merchants and Planters' Oil Company obtained a premium over that ruling for common prime Texas meal, at times $2 per 2,240 pounds. Since then a constantly growing number of American mills has adopted the same system, so that the supply of American bolted finely ground meal in sacks of 75 kilos, German weight, has been considerably augmented—in fact, in excess of the demand.

Meanwhile, American mills in general have also enormously improved their machinery during the last four or five years, and, in consequence thereof, the standard of common prime meal has in late years been raised to such an extent that there is to-day frequently not much difference between common prime meal and the prime finely ground American meal. Of course, under these circumstances, the German cattle feeders don't feel inclined to pay any appreciable premium for the two finer qualities.

This, in connection with the fact that the American bolted qualities were produced from year to year in larger quantities, has caused that, during the now ending season, American bolted finely ground meal has only held a very little higher price than the common prime qualities, frequently only about twenty-five cents per long ton higher.

There is only a limited demand for bolted finely ground cottonseed meal in 75-kilo bags at an advance in price, and the bulk of the business is done in common prime qualities. But, besides this, while the common prime qualities have improved from year to year, the American finely ground and bolted meal in 75-kilo bags has been discredited by some mills shipping quite a common quality as finely ground bolted meal in bags of the same weight.

All these facts will in future work against an appreciable advance in the price of American bolted and finely ground meal in 75-kilo bags over the price of common prime meal in 100-pound bags, and I have no doubt, should still more mills in coming seasons decide to produce this fine bolted meal and put it up in bags of 75 kilos, the difference in value between the two qualities mentioned would still be further reduced, or disappear entirely, so that the American manufacturer of the bolted finely ground meal would hardly be repaid for any possible extra outlay in manufacturing these fine qualities, and he would even be put to a direct loss, considering that the extraction of every little bit of hull and fiber reduces the weight of meal obtained.

Hence, I believe, especially judging from the experience of the last season, that it will not be to the advantage of the mills to produce bolted meal and put it up in 75-kilo bags, with the object in view of obtaining a higher price than for common prime meal. It has to be considered also, that meal put up in bags of 75 kilos, as a rule, finds a ready sale only in Germany, as England buys only in sacks of 100 pounds.

In this connection I may say yet that the weighing of the meal for the German market at 75 kilos per sack is only appreciated by the feeder and dealer, if the sacks are strong, so that the weights holds out upon arrival of the goods in Europe. If the package containing the cottonseed meal is not so strong that the meal arrives holding out in weight evenly at 75 kilos, it would also be useless to sack the goods at this weight, because the German dealer and consumer will have to reweigh every sack, if one holds out and the other not. In fact, complaints of insufficient package, which caused considerable loss in weight, have become general of late, and I suggest here yet the advisability of using stronger bags for cottonseed meal intended for export purposes.

All in all, I think that during recent years more attention has been paid by the miller to the cheapness of the sacks used for cottonseed meal than is advisable and profitable, considering that the sacks have to stand a long trip with repeated handling.

If the package is poor and breaks and short weight is caused thereby, it is only natural that, if this occurs frequently, the European importer will, in submitting his buying orders, consider such a shortage, and will give lower limits to this side than he would otherwise. Moreover, it has to be considered that poor package causes an almost continuous rehandling of the goods until they are in the consumers' hands. Dealers and consumers, I think, care more for it that the goods are delivered in strong and neat-looking packages, than for a quality finer than the common prime meal; in fact, the meal reground in Germany generally brings a somewhat better price than the American bolted finely ground meal, on account of the superior packing of the former. Respectfully submitted,

This closed the regular program for the afternoon and President Allison called up the bag question and the report on bags was again read by Mr. Bailey. The reort advocated the purchase of bags through one channel, suggesting that such purchase could be made for all the mills through the secretary's office.

A free discussion followed, in which Messrs. Benjamin, Bailey, Allison, Eichsenberg, Landa, Kiser, Sansom, Woodsall, Caswell, Werner, Dismukes and others participated.

Mr. Brodie's motion that the suggestions in the president's message be referred to committees was adopted and the association adjourned until 10 o'clock Tuesday morning.

TUESDAY'S SESSIONS.

The subject of insurance occupied the foremost place in the deliberations of the Texas Cottonseed Crushers' Association on Tuesday, and a special session was held in the evening to take action on the perplexing question. At the close of the morning session a committee, consisting of W. D. Kyser, B. Lowenstein, J. B. Dale, Jr., D. H. Caswell and L. N. Barbee, was appointed to investigate the proposed "inter-insurance" plan outlined at the invitation of the association by Milo E. Lawrence, of Kansas City.

On account of the importance of this question, the afternoon session was delayed to give the committee an opportunity to work, and when its partial report was presented the night session was decided upon to enable the association to fully discuss the insurance problem.

An auxiliary Committee on Insurance, through T. P. Sullivan, reported favorably upon the suggestion that the association organize an insurance company. Following is the report:

Report of Committee on Insurance.

This committee beg leave to report that in the short time in which they have had to investigate the subject of inter-insurance, they have become much interested in it—so much so that they recommend that the matter be now referred to our Executive Committee, with instructions that they take the matter up at once vigorously, and report their conclusions and recommendations to the mills of this association. We believe that they will find much merit in it, and we beg to insist that it be not dropped, if at all, until each member of this association has been furnished with a full and detail copy of the report of the Executive Committee. The high indorsements of the ability and high standing of Mr. Lawrence, who has attended our meeting at our request, and explained this mode of insurance to us, is an additional reason why we should seriously and thoroughly consider the subject, which, as stated, impresses us as having much merit in it, and is of much interest to every member of this association.

W. D. Kyser, Chairman.

Report of Committee on Bags and Drawbacks.

To the President, Officers and Members of the Texas Cottonseed Crushers' Association:

Your committee appointed to consider the character of bags to be used by oil mills and the question of drawback on exported cake and meal bags, respectfully present the following for your consideration:

For many years exporters have advocated the use of new bags by all oil mills for sacking all of the cake and meal sold for export, believing it to be to the interest of the mills that they should do so.

All exporters have for years been compelled to guarantee out-turns, weights in Europe to be within 1 per cent. of their invoice list, and the demand that they guarantee out-turn weights in full, is now being seriously agitated in Europe among the largest and most responsible buyers, and may have to be done the coming season, as is now on all grain exported. An exporter can and will pay that mill on whose weights he never has reclamations a higher price for its meal and cake, and it matters not how earnestly and carefully the same is weighed at the mills, there will always be some loss unless good standard new bags are used, and they well sewed before leaving the mills. It must seem clear, therefore, that it is to the interest of the mills to use such bags and put up such packages as will insure the delivery of what they ship at ports of final destination.

We are pleased to state that the use of new bags of standard quality is becoming fairly general with Texas mills, but regret to say that occasionally some mills are offered a lighter, thin, open-mesh bag at enough lower figure to tempt them to buy the same. Such purchase, while directly it may appear a saving of profit, indirectly affects the standard that other mills are trying to attain for Texas product, and reacts on the purchaser of these inferior bags and no saving or profit is made in the long run.

This bag question, as well as the question of drawback, is an important one to mills, and seems to us is getting into pretty bad shape. Our information is that the drawback on the domestic-made new bags that manufacturers have promised mills when purchasing have in the majority of cases never been paid to the mills. We are fairly familiar with this drawback business, and believe that under the present system there will always be trouble in collecting from the Government, and consequently trouble in mills collecting from the manufacturers. We also know that most of the mill owners and managers prefer attending to their own business, buying their own bags independently and irrespective of the prices or terms upon which other mills buy, but as an average, do not believe that any one mill, whatever the ability of its management may be, succeeds in buying bags at very much less than another on the same market. We believe that if these bags were all bought through one channel it would be to the interest of all mills. If they were bought at a net price with the condition that the manufacturer furnish a certificate of importation of the goods out of which they were made, the drawback on the same could be collected from the Government through the same channel, and there would be less delay, equally as low prices, and the bag business generally be more satisfactory with the mills than the present method, under which every mill buys independently, and waits sometimes indefinitely before getting the drawback promised.

We have a secretary to whom a salary is paid who is competent to do this business, which, if well done, would save for the mills largely more than the salary he gets.

If each mill agreed to buy all of its bags through the secretary, he would always be able to tell them at just what price any particular bag could be bought, and each mill could do just as they do now—buy whenever it suited them by giving their order direct to the Secretary to place, and any difference in price paid would be merely the difference in value at the time he saw proper to place its order.

On a standard 12-ounce domestic-made cental bag, we understand the Government pays a rebate of about $10 per thousand. The manufacturers in selling these bags to the mills rarely agree to promise them a rebate of more than $6 per thousand, and do not always pay this. Custom House brokers at port of export get from $1.50 to $2 per thousand for attending to filing of preliminary entries, leaving the manufacturers a profit of from $2 to $2.50 per thousand out of the drawback, and in their effort to get everything they can from the Government, it seems to be the policy of nearly every one who has anything to do with the Government they must overreach some way, else there would nt be these delays in collecting and paying these drawbacks.

With proper certificates of importation, issued by the Custom House through which the goods are imported, the business is so simple and the Government rules and regulations so plain, that almost any one should be able to comply way, else there would not be these delays and certainly so if it is not their intention to endeavor to collect anything to which they are not entitled.

It would be impossible for this to be done by each mill on its own account, but if their purchases were all made through one channel, and the certificates of importation delivered to that source, the same party could file these certificates in the Custom House at the port through which the bags were exported, arrange with some Custom House broker to file the preliminary entry when shipments were going aboard steamers, arrange with the exporters to send him copies of ships' bills of lading for custom-house purposes only, file his final entry after receipt of same, together with the necessary affidavit, and collect the rebate promptly.

Outside of all this there are so few manufacturers of bags out of imported goods that the mills in this age of combination are in danger of a combine being formed, and, if formed just as the season was about to open, mills would be at their mercy, therefore a bag department, under the management of the association, if successful in the purchase of bags and collection of drawbacks for one season, would, during such time, get so familiar with the bag business that we do not believe it would be very long before the same would result in the establishment of a bag factory in Texas, owned and controlled by the independent Texas mills, importing the goods direct and manufacturing the bags at home.

The machinery for such a factory consists mainly of sewing machines, and it is necessary to locate such factory where there is a large population in order that ample labor may be obtained at reasonable prices; the building may be a mere skeleton, and yet sufficiently fireproof to secure low rates of insurance. More important, however, than all else, would be progressive, intelligent and conservative business management, and this can be secured and directed by our association.

If our suggestions regarding the mills all agreeing to buy their bags through one channel the coming season, and collecting the drawback through the same channel be not approved, then we suggest that in buying our bags we buy the same at a net price to us, and let the manufacturers collect the drawback on their own account. We might in such case have to agree that we would advise the manufacturers of sales made from time to time, giving the names of the buyers from whom they could arrange to get bills of lading for custom-house purposes, and might have to give them a guarantee that we will pay them at the end of the season drawback on such bags as were not exported.

Telegrams were received from Waco inviting the association to hold its next meeting in the Geyser City.

Mr. Erwin feelingly asked if it should be decided to accept the invitation extended by Waco, what assurance the members of the association will have that they will not be arrested and entertained at the jail.

All the old officers were re-elected as follows:

President—Jo W. Allison, of Ennis.

Vice-President—R. L. Heflin, of Galveston.

Treasurer—Marion Sansom, of Alvarado.

Secretary—Robert Gibson, of Dallas.

These, with R. K. Erwin, Harry Landa, D. H. Caswell, J. B. Dale, Jr., and W. W. Boyd, will constitute the Executive Committee.

One of the pleasant incidents of the evening session occurred when the secretary, Col. Robert Gibson, who has worked earnestly and untiringly to promote the success of the association, was called aside and on behalf of a number of his friends who appreciated his faithful work, presented with a substantial purse as a testimonial of their regard.

Col. Gibson was deeply touched and voiced his appreciation in a feeling manner. The annual salary of the secretary's office was increased on account of the heavy increase in work.

Interesting and instructive papers were read during the day by H. L. Scales, R. L. Heflin, F. W. Brode, Louis K. Bell, Harry

Landa and G. Wolf Holstein, which are printed below.

On Wednesday the members, accompanied by a number of ladies, left San Antonio for a trip to the city of Mexico.

The Building of New Oil Mills.

BY H. L. SCALES.

Mr. President and Gentlemen: The building of so many small oil mills throughout the State makes that subject intensely interesting to the mills already doing business. It is clear to any thoughtful person that the business is rapidly becoming overdone in some sections; that the crushing capacity is becoming greater than the supply of raw material; that increasing competition, with a diminished supply of raw material, is going to reduce the legitimate revenue in the business, until it becomes actually unprofitable. What is the cause of all this over-investment in one particular kind of manufacturing enterprise, to the exclusion of every other line, particularly when so much raw material of other kinds can be had at low prices, without freight for other manufacturing interest? The fact is, one community hears of some large dividend that some neighboring community has made out of an oil mill. They do not take the pains or trouble to investigate the facts; they act on rumors and "jump into the fire" also, much to their discomfort and regret afterward. People generally are inclined to publish all their successes to the world with magnified letters, but bury their losses deep, never to be heard of. Such, however, is nature. Who ever heard of a speculator who told of his losses, or would be persuaded to keep quiet his winnings?

The season just ended was a profitable one to mills in Texas. Why so? Because all the seed in other States were damaged from too much rain, while Texas mills were getting good, sound seed, and consequently prime products, which made a sharp advance in price after the mills had bought and stored quantities of seed. The success of the Texas mills the past season was purely accidental; just such a condition may not happen again in years. The business in all the other States was unprofitable the last season. The Texas mills, as a rule, do not pay a reasonable interest on the investment; many mills are in debt largely. Some are being sold "under the hammer" where the investor expected, from reports they had heard about other mills, large profits. The time is near at hand, if the building of new mills continues, when it is going to be a "survival of the fittest." Those mills best located to get the benefits of cheap fuel and competing railroads and managed by conservative, experienced men, are going to make "life miserable" for mills less fortunately situated and managed.

Why do people follow each other like sheep into an already overdone business, when there is only one or two cotton spinning factories in the State, practically without competition, with thousands of bales of cotton everywhere? You build one cotton mill in a town in Texas and then build ten more in the same town, and they do not hurt each other. Why? Because there is enough raw material for all. It is different with an oil mill in the same town, as there is only enough seed for the one to work on, say, six or seven months; put another oil mill in the same town and they get seed enough to only run three or four months each. The supply of raw material is sufficient to sustain one mill, but not enough for two; the result is, both mills are unprofitable. Large oil mills have been built on the Gulf coast and at central interior towns with more crushing capacity than is necessary to crush all the seed in the State. These mills are there and are going to run, even if the business is unprofitable to the owners for a term of years. If all stations build oil mills also, the business is bound to become unprofitable to all; therefore, disappointing. I venture the assertion if one community in Texas builds a cotton spinning mill and employs expert help and management, that it will pay handsomely, and that others will then follow, until our grand State, where over one-third of the staple is raised, will be covered with cotton mills, spinning fresh from the fields, giving employment to thousands, making the State and everybody in it prosperous. Let us encourage the building of different kinds of factories. Teach the people they can operate something else besides cotton gins, oil mills, or saw mills. Texas will be prosperous and all classes will be happy only when we have both diversified farming and diversified factories.

"How Can We Better Provide for Amicable and Just Settlements of Differences Between Buyers and Sellers?"

(By F. W. BRODE, of Memphis, Tenn.)

This is the subject with which I am honored, and it should certainly be of the greatest interest to all connected with cottonseed products, and I feel highly complimented in being selected to present my views.

The theme is really too broad and far-reaching to be discussed fully, and I can give but an outline of suggestions, but they are honest.

One especially applicable to the matter in hand is, follow the Golden Rule, "Do unto others as you wish to be done by." It really covers the case, and if you will reflect upon this rule, there is but little to be added.

It is and must be, conceded that errors and mistakes can and do occur which may be called unavoidable, but they are not.

My experience with oil mills has been since the year 1873.

There are two men now managing mills with whom I have done business all along, and from the beginning until the present day I have been buying and selling their products, and assure you that they always knew what class of seed was being daily crushed in their mills, and what grade of product was being turned out. The seed crushed was examined, and if found bad and the product was not equal the requirements in grade, it was kept separate, the cake and meal sold under a different brand, and the oil sold by sample. No chances taken of a possibility to pass, and if it did happen, in isolated cases, that something was wrong, they were able to trace the fault through their superintendents or engineers.

As new mills gained experience they followed in these lines, finding it much more profitable to pay close attention, and see that buyers received what they bought and be protected on goods against which sight drafts were drawn, than to pay claims.

The buyers have no opportunity of examining products, for they cannot be at the mills when shipments are made, therefore, close attention should be given, that the proper goods are shipped.

Now, will you kindly, as crushers, change places with buyers, and reflect upon the injustice (not to use a harsher expression) inflicted upon them, when on arrival it is found the goods received are below in grade and value that for which they paid; sometimes receiving a grade totally unfit for the requirements it was bought.

Frequently when the buyers' complaints come in they are charged with making unjust claims before an investigation has been made.

Managers of mills should consider that the buyers have been injured and an immediate investigation, and reparation made if complaint be just.

For years these have been the experiences, and it is noted with pleasure and satisfaction, that mills are remedying evils which have existed to their disadvantage, and in the end to their loss, and, while I mention this, it strikes me that since the formation of associations of crushers, and of superintendents, this has been especially marked.

Associations of this kind can only be of great benefit, either directly or indirectly, to its members. Nations of the world are held together in this manner. "In unity there is strength." Association with your fellow-beings brings enlightenment with it.

Naturally, buyers seek to buy where full value is received. This is common sense—this is business—and wherever a mill does not ship the grade agreed upon, naturally buyers seek other mills.

The buyers often demand that drafts be drawn for three-fourths or nine-tenths value, and weights and quality guaranteed at destination. Now, why is this? Simply because the buyers have had some sad experiences and did not receive what they bought and paid for.

Bear in mind that it is to-day the cleanest business in existence—the money is virtually paid for the manufactured goods as soon as they are loaded on cars; so it seems that common courtesy would dictate that buyers receive full protection.

As managers, or presidents, you may not be at the mill at all times, but you can compel your superintendents to see that your orders are carried out. Managers should charge their superintendents to ship what is sold, either by sample or grade and classification, thereby avoiding any controversy on their products. On the other hand, should any mishap or oversight occur, and it is found upon investigation that there is cause for complaint, then the claim should be promptly adjusted. Investigate. It would be advisable if a buyer makes a claim either on grade or weights, be just, investigate, and if you cannot agree as to the proper difference in value, then arbitrate.

As to buyers making unjust claims, it is admitted that some do at times, possibly through errors, but this is seldom the case. Mills and buyers should verify by separate men the correctness of weights, quality and conditions in loading and unloading tank cars.

Sometimes a claim is made by wrong sampling, or in oil by mistaken tests, the chemist making the test hurriedly, but all this can be remedied by investigation.

The main thing is for both sellers and buyers to be honest about it, and have a desire to do what is right. My experience has taught me that it is the simplest matter in the world to adjust differences when buyers and sellers act on this principle.

Now, if there is trouble, and mills and buyers cannot agree on a proper basis for settlement, what is the best and most amicable mode of adjustment? Arbitration! Most of the buyers are willing to do this, and all mills ought to be. I have found but few to refuse, and some of them lost money by not arbitrating.

The Memphis Merchants' Exchange has three special committees on Cottonseed Products; one each on Arbitration, Standards and Market Quotations. The first is composed of three mill men and two buyers, and, notwithstanding that the mills are in the majority, justice is done both buyer and seller. Nearly all the large buyers are members of our Exchange, and submit controversies to it for arbitration, and are satisfied with its decisions. Many mills outside of Memphis are members.

The past has been a hard season for the mills in the Mississippi Valley and those east of the Mississippi River. On account of severe weather, the seed was bad and made off oil, some of very low grade, and therefore differences have been a little harder to adjust than formerly.

You crushers of Texas have been exempt from these trials and tribulations, as heaven smiled upon your magnificent State, and upon you, and you smiled in return. May your smiles never grow less.

In our Exchange up to the present the oils are tested in the old way—by color, taste and smell. This may appear crude and unsatisfactory to some, and we are contemplating a change in our rules, and make chemical tests, so as to ascertain the fatty acid and loss in refining. This may not bring us much nearer, for most of the refiners, if not all, concede that the fatty acid test is not sufficient guide, and mistakes can be made by chemists in both tests, but the buyers of oil have some rights, and should have a voice in the matter of testing oils for arbitration, so as to arrive at a true difference in value.

In conclusion, referring to the theme to provide for amicable and just settlements between buyers and sellers, will say again:

First—Avoid trouble. Ship what you sell; see to it.

Second—If you have reclamations on your product, investigate thoroughly, and if found that the claim is just, settle it.

To the buyers, do not make trifling or unjust claims, but if made, they should be based on justice and equity.

If this spirit is carried out, buyers will find the mills are ready to adjust differences, and to both mill men and buyers would suggest, do not forget the Golden Rule; let it be the underlying business principle; let it be your guide in the delivery of products against cash, and for the buyers in making claims. Be assured if you follow this that the broker will ever be your guardian angel until the goal is reached, where the wicked cease from troubling, and the weary are at rest.

Commercial Features of the Cottonseed Industry.

By Louis K. Bell, of the Oil, Paint and Drug Reporter, New York.

Mr. President and Gentlemen:

The commercial features of the cottonseed industry have presented very little of interest during the past year that is worthy of taking up your time in discussing upon this occasion. The wave of prosperity which has rolled up golden sands for most industrial enterprises during the year does not appear to have passed without leaving its imprint upon your shores. In spite of some unpromising conditions at the beginning of the season the later crush in the valley and in your own State has brought the crop up to the record of the previous year, while prices have everywhere been helped by the advanced cost of competing fats. The exports thus far have been phenomenal, amounting according to our returns to about 38,000,000 gallons from the four leading ports. This is a gain of about 8,000,000 gallons over those of the preceding crop year to date. The greater part of this gain was in shipments from New Orleans, which has cleared about 13,000,000 gallons against six and a quarter millions up to the same date last year. New York exports amount to between 16,000,000 and 17,000,000 gallons, or practically the same as last year, and Galveston returns of about 6,000,000 gallons show a very small increase over 1897-98. The Baltimore shipments of 2,000,000 gallons are nearly double those of last year.

While the tendency of prices has been favorable to crushers, and the season has undoubtedly been a fairly profitable one both for mills and refiners, our advices do not indicate that this industry has had quite its full share of the benefits which improved conditions generally have brought to American manufacturers.

To what extent this represents a condition which might have been remedied by closer relations between mill owners and their various associations I shall not attempt to say, but it is easily seen that such incomplete organizations as now exist have done much toward preventing a worse state of affairs than you have passed through. In an industry so extensive and which embraces competing interests spread over so wide an extent of territory, it is scarcely possible to bring about a condition that will give the manufacturer such control of the market for his products as is enjoyed in some other branches of trade. At the same time, the mills have a common interest which might be well served by closer alliance with the local and interstate organizations, and we are looking hopefully forward to the time when every mill owner and refiner will help to secure the benefits which would accrue from more strongly supported associations.

The work done during the past year by the zealous and untiring Secretary of the Texas and Interstate Associations has shown what may be accomplished by the backing of an organization. Here in Texas you have been able to deal successfully with some very important transportation problems, which seriously threatened your prosperity. This could not have been accomplished by any number of mills acting independently, and the important influence which the Interstate organization has wielded upon a matter of so great international consequence as the proposition to increase duties in France, should be appreciated by every man who is interested in the manufacture or sale of cottonseed products in this country. I have taken occasion, whenever opportunity has presented itself, whether at conventions or through the medium of the paper with which I am connected, to appeal for organization with all the force that I could command, even at the risk of making the subject tiresome to you, but the results of organization, so far, have borne out all that I or any other advocate has ever claimed for it, and I cannot refrain, at this time, from urging upon every mill owner to join every association in his trade to which he is eligible.

Referring to the benefits of organization, I cannot let this occasion pass without appealing, as I always do at every meeting of cottonseed mill men, for some system of keeping you all informed as to the statistical position of the business. As it now stands the largest companies, which have agents in all sections of the cottonseed belt, are able to keep fairly well informed as to general conditions in each section. But the smaller individual mills, which constitute the large majority both in number and in producing capacity, have little chance of knowing how matters stand outside of their own locality. The information which we give you in our market reports and news columns each week, and that which the brokers give you in their frequent letters, serve a good purpose, and keep you posted as to current market conditions, but this sort of information does not cover many important statistical facts of which you are the sole custodian. There should be no lack of willingness on the part of individual mills everywhere to report fully upon stocks both of seed and oil, and other data of a similar nature, to some disinterested person, who should compile from the returns thus received a table of aggregates and averages, which would enable each mill owner to know the situation as a whole and also to know just now he stood with relation to it. There need be no danger of any violation of confidence, or the exposure of the secrets of any mill by the bureau to which the statistics were intrusted. We have for more than twenty-five years, with only a brief interruption, made an effort to gather statistics at the close of each crop year, and the publication of these statistics in the aggregate form has been of vast benefit, but no violation of confidence has ever been permitted in our office, and the statements made to us by each mill owner have never been exposed. A more liberal view of the value of these statistics and of the perfect safety of furnishing them to any compiler upon whom you might agree would result in lessening the advantages which buyers, through their wide correspondence and numerous representatives, now hold. At the same time it would greatly strengthen the commercial position of every crusher in your organizations. The time will come, gentlemen, when keener competition will force this matter upon your attention with more persuasive eloquence than I can command, just as it has already forced you to consider other suggestions the importance of which was not promptly recognized. In cotton, grain, provisions and many other lines the value of current statistics is recognized, and nowhere could they be of more advantage than in this rapidly growing cottonseed industry.

In speaking to the mill superintendents at their meeting at Houston two years ago I recommended the adoption and use of a uniform barrel with six hoops, and also that there should be no mark on barrel head except a shipping mark and the weights. The purpose of this suggestion was specially to facilitate the export business, although in most domestic outlets the change would have been equally welcomed. But the suggestion was not well received by some of the refiners and a few of my friends in that branch of the business intimated to me that it had no practical value. Of late, however, I have noticed that nearly all the receipts at New York from Atlantic ports are in eight-hooped barrels, with only the shipping and weight marks, and I am also informed that most of the Texas and valley oil reaching our port is equally well and uniformly coopered. I cannot help feeling that my suggestion was a timely one, though I am free to admit that it was the demands of the trade rather than my influence which finally compelled the adoption of this improved cooperage. Another feature which I notice and which has been adopted by some up-to-date refiners is that where it is desired to distinguish the grade of oil the heads are painted yellow to designate yellow oil, while white heads represent white oil, but there are no marks except those already referred to. The omission of brands saves repainting the heads, and the oil as it arrives is ready for reshipment with the least possible labor, and labor comes higher at any of the ports than it does at the mill or refinery. There is also, by reason of the better cooperage, less loss by leakage in transit, and the only complaint I have heard against this improvement has come from the coopers, who find that the adoption of the eight-hooped barrel has greatly curtailed their opportunity for charges against the oil passing through their hands.

The exacting demands of trade are more easily enforced by buyers as the sources of supply increase, and the manufacturer who first notes the necessity for improvement and meets those necessities is the

man who finds the readiest sale for his products. At the same time these improvements are, for the most part, economical to the shipper, since they result in a saving of loss and of the charges against the goods in rehandling.

I have already occupied more time than you have probably intended to allot me, but I must ask your indulgence for a moment longer, while I refer to the subject of mutual fire insurance as one of the most important that can command your attention. The practical success of this form of insurance has been fully demonstrated by the Mill Mutuals in New England, and there is no reason why the system should not be applied to every industry where a reasonable uniformity of risks can be secured. I think that it is safe to say that the system has, since its foundation, saved the mills more than 75 per cent. of their premiums under the old form of insurance, and, what is still more important, has lessened the hazard of fire. No honest man can afford to burn out at any time, and prevention of fire is as important to him as the reimbursement which follows the destruction of his property.

Mr. President and Gentlemen: I thank you for the opportunity you have given me to be with you, and one of you, on this occasion. I appreciate your invitation as a personal compliment, as well as a compliment to the paper which has for so many years been identified with your industry. The expansion of that industry, as exemplified by the great development in the Lone Star State, suggests enormous possibilities for the future, and I know of no set of men more surely destined to work out those possibilities than are they who are to-day identified with the management of Texas mills.

Analyses of Cottonseed Meal.

BY G. WOLF HOLSTEIN.

Mr. Chairman: When Mr. Gibson wrote asking for papers to be read at this meeting it seemed at first too absurd for me to think of attempting to say anything that would interest you, and even now I am of the same mind, and only do it in the hope that it will start you talking, and thus something of value be brought out.

At the beginning of the last crushing season I determined to try and find out for myself whether or not I was getting the best result possible from the seed crushed. I was satisfied as to the quality of the product, but, notwithstanding a very satisfactory yield of oil the previous season, I did not feel certain that I was getting all the oil in the seed; I realized that it was not the quantity of oil extracted; but the amount left in the cake which was the true measure of success or failure. I therefore purchased a pair of scales weighing, to half grains graduates, a small glass funnel, and prepared for work.

The meal to be tested should be reduced to a fine powder, then carefully dried to expel any trace of moisture and weighed. The amount used is not material, except that if in quantities of 100 grains it will require no calculation to determine the per cent. of oil in cake. I generally use 100 grains. First put a small pledget of fine cotton in the bottom of the funnel; on it place the meal, pressing it down carefully and as firmly as possible. Now fill up the funnel with the solvent which you intend to use. I have always used bisulphid of carbon as being cheapest, and I think as good as any. The bi-sulphid slowly passing down through the meal, carrying with it the oil in solution, should be received in a small graduate, so that you may note the color. Of course, it is understood that fresh portions of the bisulphid are to be added from time to time; and in order to more readily note the change in color of the solution, each portion passing through should be emptied into a receptacle in which it may be finally weighed. For this purpose I use a small aluminum cup weighing about 200 grains. I do not think it necessary or well to continue the operation until the solution comes through perfectly clear, for at the last feel sure the color is not due to the presence of oil, but to other coloring matters in the meal, and to extract there would give a false result, causing the amount of oil to appear greater than it really is. When from the color of the solution you conclude that all the oil has been extracted, remove the meal from the funnel, carefully preserving every particle, and spread out on a paper to dry, which it will soon do. When apparently perfectly dry, place on a steam pipe for a few moments to complete the drying. I do not exactly understand why this should be necessary, for there will not be any perceptible amount of the bi-sulphid thrown off, and yet a considerable loss in weight occurs. Do the same with the oil, being first certain in each case that all the bi-sulphid which will naturally evaporate is gone, for the point of ignition is so low that there is danger of its taking fire. Before using artificial heat in this way, I invariably found that I had greater weight of the products separately than of the original meal. For instance, I would weigh the oil and find that I had, say, 9½ grains and of the meal 93 grains. This puzzled me greatly at first, until I hit upon the idea that there was something more than oil and meal present. I imagine that the meal, after the oil is all dissolved out, absorbs moisture from the atmosphere.

Now, as to the value of all this, of what use is it? For competition is too keen, life too short to waste it in experiments, which are in their results simply interesting. In the first place, it enables you to know exactly what you are doing; to know not only how much oil you are getting from a ton of seed, but whether or not you are getting all there is in it, which is much more to the purpose. Again, it may be that one of your presses is not standing up as steadily under pressure as the others; you know that there is a leak, in check, or elsewhere; will it pay to stop and find it, or shall you wait for Sunday? An analysis shows you just what that particular press is doing, and then you know what to do.

Last winter one of my presses did not seem to be doing as well as the others. I analyzed the cake and found that I was actually losing 25 cents per ton. Again, it will enable you to know exactly what thickness of cake, what amount of pressure, what length of time will yield the greatest and most profitable results, for it goes without saying that it by no means follows that the method of procedure which extracts the greatest amount of oil is the most profitable; it may be that the extra yield is gained at an expense of time or press cloth too great to be profitable, but whether this is so or not, can only be determined with certainty by the knowledge you will gain from an analysis of the cake. Again, what may be good practice in one locality and season may be bad practice in another locality and at another season. Moreover, I think that we may expect that once we begin to make systematic analyses of our cake, we will be very apt to go further and attempt to attain exact knowledge of results in other branches of the business. For instance, might it not be desirable to examine the meal as it comes from the rolls, under the microscope, that we may know whether or not we are crushing, breaking down the oil cells properly? May this not have an effect on the quality of the oil and in regard to the amount and character of the coloring matter present? In conclusion it seems to me that the time has arrived in the cotton oil business, when it is a question, as my friend Irwin aptly says, of the "survival of the fittest." Are we, then, each striving, for I assume that we all desire to be found among the elect when the books are made up—intelligently? For upon the intelligence of our striving, our struggle, will our success or failure depend. I wish again to disclaim any idea that I am telling you anything new. I have read this paper, not with the thought of imparting knowledge, but believing in the importance of the subject, in the hope that the discussion which I trust will follow will add what is lacking.

The Chemistry of Lakes.

Lakes are a class of pigments which have been used for a long period of years by artists and painters. They were originally prepared from many natural vegetable or animal-coloring matters, such as madder, cochineal, fustic, etc.; but of late years the coal-tar colors have been pressed into service for making lakes. As a class they are generally brilliant in color, rather translucent, and are therefore used principally for tinting and glazing over other pigments. None of them are remarkable for permanence. All (with perhaps the solitary exception of madder carmine) fade with more or less rapidity on exposure to light and air. The most brilliant and purest lake is carmine, while rose-pink is an example of what might be called a degraded lake. Generally they are only made on comparatively small scales for artists and decorative purposes, a few such as rose-pink, Dutch pink, are made in large quantities, but none of them on as large a scale as chrome yellow. The introduction of the coal-tar lake pigments has had a strong influence in reducing the consumption of the natural lakes.

The color-producing properties of the natural organic coloring matters, such as cochineal, fustic, Persian berry, logwood, etc., lie in the presence in them of certain bodies, coloring principles they are called, which may be colored or colorless. These coloring principles, such as the carminic acid of cochineal, the morin and morintannic acid of fustic, the haematein of logwood, Brazillin of Brazil wood, have slightly acid properties; at all events they have the property of combining with metallic oxides, such as soda, lime, alumina, chromium oxide, etc., to form insoluble colored compounds or salts; and these constitute the basis of lakes.

Lakes are therefore compounds of the coloring principles of natural coloring matters with inorganic bases. In a few cases, such as carmine, crimson lake, and some others, the lake is made fairly pure; but in others, such as rose-pink, Dutch pink, etc., the lake is precipitated on to a base (so-called) or diluent, such as chalk, barytes, with the object of cheapening the product. Thus carmine and crimson lakes are prepared from cochineal by precipitating its solution with alumina; Dutch pink by precipitating fustic, quercitron, or Persian berry solutions on to chalk or barytes with alumina; yellow lakes by precipitating the yellow woods with alumina, tin, etc.

Of late years so-called lakes have been prepared from the coal-tar colors. In some respects these resemble the true lakes in composition, being essentially combinations of a color principle with a base, but they differ in that the color principle is derived from coal-tar, and that they always contain a base or diluent, the addition of which is made with three objects—first, to reduce the cost; second, to develop the proper color of the lake; third, to give body or covering power.

RED LAKES.

Among the natural coloring matters which can be made to yield red lakes, only cochineal, madder, and Brazil wood are used commercially. From cochineal are obtained carmine, crimson, and scarlet lakes, and a few others. From Brazil wood is got rose-pink and some cheap dark-red lakes. Madder yields the madder lakes.

CARMINE.

The exact method by which this fine pigment is made from cochineal is considered a trade secret, and it is doubtful whether it is properly known by others than the makers thereof. Descriptions of processes for making it have been published from time to time, but some of these are misleading, and, perhaps, have been made intentionally so. Carmine has been known for more than two hundred years. In 1636 Homberg published the first recipe for making it, but its discovery is unknown, although an early writer states that to a Franciscan monk belongs the honor.

The chemical nature of carmine is even now but imperfectly known, and the most modern investigators of cochineal and its products, De la Rue, Schutzenberger, Schaller, and Hlasewetz, although agreeing in many respects, differ, as might naturally be expected.

Cochineal, from which carmine, crimson, scarlet, Florentine, and other lakes are made, contains a coloring principle named carminic acid by De la Rue, who was one of the earliest investigators of cochineal. This carminic acid may be extracted from the cochineal by suitable means. It forms a red powder soluble in water to a crimson solution. It possesses, as the name indicates, acid properties, and combines with bases such as soda, lime, alumina, tin, etc., to form carminates; those of the alkali metals are soluble in water, but those of lime, alumina, tin, and other metals, are insoluble in water, and form the base of the well-known cochineal lakes.

Carmine is a powder of an intense fiery scarlet color, varying somewhat in tint. It is soluble in strong mineral acids. In ammonia, caustic soda, or caustic potash, it is soluble, forming deep crimson solution. From these solutions acetic acid, or even exposure to the air causes the deposition of the carmine but little altered. Salts of heavy metals injure the shade of carmine. Carmine, on being heated in a crucible, burns, and leaves about 12 to 15 per cent. of a white ash, composed principally of alumina.

As a pigment carmine works well either in water or oil, and is used to a slight extent as glazing and tinting color. But it is deficient in permanency; a few months' exposure to sun and air is sufficient to destroy its brilliancy, and in from one to two years it fades completely. Carmine is frequently adulterated, but adulterations are detected by treating the carmine with ammonia, when the pure color dissolves, leaving the impurities as insoluble residue.

Liebermann gives the following analysis of a sample of cochineal carmine:

	Per cent.
Moisture	17
Nitrogenous matter	20
Ash	7
Coloring matter	56
Wax	traces

The ash contains:

	Per cent.
Stannic oxide, SnO_2	0.67
Alumina, Al_2O_3	43.08
Calcium oxide, CaO	44.85
Magnesia MgO	1.02
Sodium oxide, Na_2O	3.23
Potassium oxide, K_2O	3.56
Phosphoric oxide, P_2O_5	3.20
	99.62

Lafat gives the following analysis:

	As sold. Per cent.	Dried. Per cent.
Water	15.50	....
Ash	6.87	8.14
Nitrogenous matter	23.26	27.60
Coloring matter	54.37	64.26

which differs but little from Liebermann's analysis. The ash contained

	Per cent.
Copper oxide, CuO	0.35
Stannic oxide, SnO_2	0.14
Alumina, Al_2O_3	40.18
Ferric oxide, Fe_2O_3	trace
Calcium oxide, CaO	44.20
Magnesia, MgO	0.61
Sodium oxide, Na_2O	5.40
Potassium oxide, K_2O	3.20
Phosphoric oxide, P_2O_5	2.71
Silica, SiO_2	0.60
Carbonic acid, CO_2	2.31

This ash contains the alumina and lime in the ratio of Al_2O_3 to 2CaO. This would lead to the inference that the published recipes for making cochineal are defective as omitting lime salts, for it is doubtful whether the insects themselves would contribute the lime required for the proper production of the carmine. The other constituents of the ash are of no importance, and are probably derived from the vessels in which the carmine is made, and from impurities in the material used.

From the above analysis it will be seen that carmine is essentially an alumina-lime lake of cochineal, in which the bases and the coloring principle are combined in equivalent proportions, or thereabouts.

Crimson lake, carmine lake, Florentine lake, scarlet lake, purple lake, and some other red lakes, are prepared from cochineal by combining with alumina. They vary a little in tint, which is due to their containing varying proportions of carminic acid and alumina. The proportion of the latter constituent is greater in these lakes than in carmine. These lakes have a fine color, are strong in tinting power, and are used both in water color and oil painting, chiefly for tinting or glazing purposes. They are not permanent pigments, fading slowly on exposure to air and light; are more permanent when used as oil colors than as water colors.

Decoctions of cochineal give the following reactions with various metallic salts:

Alumina sulphate gives a bright crimson solution; on adding sodium carbonate a crimson precipitate is obtained.

Stannous chloride gives a dull purplish-colored precipitate.

Copper sulphate gives a purple precipitate.

Ferric chloride gives a brown precipitate.

Caustic soda forms a bluish-crimson solution.

Strong sulphuric acid gives an amber-colored solution, which turns pale yellow on diluting with water.

RED WOOD LAKES.

The red woods, Brazil wood, Lima wood, sapan wood, bar wood, cam wood, contain coloring principles capable of forming lakes with metalic bases. The coloring principle of some of these, i. e., Brazil wood, is soluble in water; in others they are insoluble—bar wood, for instance—and hence it is difficult to make lakes from such, although Roberts and Dale patented a process for their preparation.

Lakes from red woods are sold under a variety of names—rose pink, red lakes, Turkey lake, drop lake, &c., and are mostly used by paper-stainers. They have given place to lakes made from the coal-tar colors, which are more brilliant in color and cheaper to make.

The coloring matter of Brazil wood exists in the form of an almost colorless principle known as brazilin. This is soluble in water. By oxidation it is converted into a colored body known as brasilein, and it is the combination of this body with the metallic bases which constitutes the lakes.

Sapan wood and Lima wood contain similar, if not identical, coloring principles to Brazil wood. In them, however, the brazilin is accompanied by other substances, which have some effect on the shade of the lakes made from them.

The best Brazil wood lakes are made by treating decoctions of the wood with freshly-precipitated alumina, or by adding alum and soda to the decoction. Rose pink is a cheap lake prepared from Brazil wood by adding whiting and alum.

Bar wood and cam wood contain coloring principles which are insoluble in water, but are soluble in alkaline solutions. By preparing such alkaline solution and precipitating with alumina and tin lakes may be made.

Lakes made from the red woods are not remarkable for brilliance or permanence. They are dark, bluish-red lakes, fairly strong in coloring power, although much here depends upon the proportion between the alumina base and coloring principle.

Decoctions of Brazil wood give the following reactions with solutions of metallic salts:

Alumina sulphate gives a red precipitate.

Stannous chloride gives a pale-crimson precipitate.

Lead acetate gives a violet-rose precipitate.

Ferric chloride gives a chocolate-brown precipitate.

Copper sulphate gives a brick-red precipitate.

Caustic soda gives a crimson solution.

Strong sulphuric acid gives a red-brown solution, which on diluting with water turns to a pale amber.

YELLOW LAKES.

These are obtained from the natural dyewoods—fustic, quercitron bark, Persian berries, the two latter giving the best lakes. Fustic contains two coloring principles, morin and morintannic acid, which form olive-yellow lakes with the metallic oxides. Quercitron bark contains a coloring principle, to which the name of Quercitin has been given, and this is also found in Persian berries. Quercitron and Persian berries yield the brightest lakes, which are sold as yellow lakes, alum, with occasionally tin crystals, being used as the precipitating agents. What are known as Dutch pink, English pink, are cheap yellow pigments usually prepared from quercitron with alum and chalk. These yellow lake pigments have the merit of keeping their color better in gaslight than many other yellows. These yellow lakes work well with oil and water, but are not permanent on exposure to light and air.

The yellow woods give the following reactions with metallic salts:

PERSIAN BERRY.

Alumina sulphate does not give a precipitate. On adding caustic soda or ammonia a brownish-olive precipitate is thrown down; sodium carbonate throws down a brighter colored precipitate.

Stannous chloride gives an olive-yellow precipitate.

Lead acetate gives a yellow-brown precipitate.

Ferric chloride gives a dark olive-green precipitate.

Strong sulphuric acid gives a yellow-brown colored solution, from which water throws down a brown precipitate.

QUERCITRON BARK.

Alumina sulphate gives an ocher-yellow precipitate.

Stannous chloride gives an orange-yellow precipitate.

Lead acetate gives a dark yellow-brown precipitate.

Copper sulphate gives a dull-yellow precipitate.

Ferric chloride gives a dark olive-green precipitate.

Caustic soda forms a dark yellow-brown solution, on adding acids, to which a yellow-brown precipitate falls down.

Strong sulphuric acid forms a brownish-yellow solution, from which, on diluting with water, a dark-brown precipitate falls down.

FUSTIC.

Alumina sulphate gives a bright orange-yellow precipitate.

Stannous chloride gives a similar precipitate.

Lead acetate gives an orange-yellow precipitate.

Copper sulphate gives a dull yellow precipitate.

Ferric chloride gives a dark olive-brown precipitate.

Hydrochloric acid throws down an orange precipitate.

Strong sulphuric acid gives a brown-yellow solution, from which, on diluting with water, a brown precipitate is obtained.

ANNATTO.

Alumina sulphate gives a brownish precipitate.

Ferric chloride gives a brownish-yellow precipitate.

Stannous chloride gives a red-brown precipitate.

Strong sulphuric acid gives a dirty yellow-brown solution.

TURMERIC.

Alumina sulphate gives a yellow precipitate.

Ferric chloride gives a brownish-yellow precipitate.

Stannous chloride gives a yellow precipitate.

Caustic soda gives a dark amber solution.

Strong sulphuric acid gives a pale yellow solution.

MADDER LAKES.

Madder is the ground root of a plant that was formerly very largely cultivated at Avignon and other places in France, but which has almost entirely been replaced during the last twenty years by the alizarine from coal-tar. The coloring principle of the madder plant (Rubia tinctoria) exists in the root in small quantities as a colorless glucoside called ruberythrin. By oxidation this is converted into the coloring principle, alizarine. This body has the property of combining with metallic bases such as alumina, iron, tin, lime, etc., to form a series of colored bodies, which are produced in the manufacture of madder and alizarine lakes, and in the use of madder in dyeing and calico printing. Very little madder is now used for lake-making, and but little in the other industries. The discoveries of Perkin, Graebe and Liebermann that alizarine could be obtained from anthracene, a coal-tar hydro-carbon, and that artificial alizarine was not only cheaper but much easier to apply, has caused the use of madder to become obsolete. Further than that, the researches of color chemists have placed at the disposal of lake-makers, etc., a number of alizarine-like bodies, which are equally as useful as alizarine itself, but which are not available with the old madder.

Madder lakes are usually of a rose-color, work well whether used along with oil or water. They are permanent pigments, resisting exposure to light and air for a long period.

Alizarine lakes, varying in color from a scarlet to a crimson, can be made from alizarine by the use of alum and tin crystals. These are permanent pigments, of which more will be said later on.

Logwood is used to produce dull blue lakes with chrome and violet blue lakes with alumina. The coloring principle in logwood is a substance known as haematein, which, on oxidation, changes into haematoxylin. Logwood makes fairly good lakes, possessing some degree of permanence on exposure to the air.

Decoctions of logwood give the following reactions with metallic salts:

Alumina sulphate turns the color of the aqueous solution red.

Ferric chloride gives a blue-black precipitate.

Potassium chromate gives a black gelatinous mass after some time.

Copper sulphate gives a violet-black precipitate.

Antimony chloride gives a violet precipitate.

Caustic soda turns the color of the solution violet.

Hydrochloric acid turns the color of the solution bright red.

INDIAN LAKE—LAC LAKE.

This was made from Indian lac. The coloring matter contains, in crude lac, the produce of the Coccus lacti, and which is separated out in the same way as carmine lake, the shade obtained being very similar, if anything, rather bluer in tint. Lac lake is slightly more permanent than carmine lake, but is now quite obsolete, the introduction of the coal-tar dyes rendering it unprofitable to extract lac dye.

In lake-making no definite proportion can be used with the expectation of always obtaining the same result. The woods vary so much in quantity and quality of the coloring principle that they contain that they will not give the same shade of lake at all times, although the same process and quantities may be used with scrupulous fidelity. The lake-maker must be prepared to modify his process from time to time, according as he sees the kind of results he is obtaining.—Oil and Colorman's Journal.

Mixing Oil Colors and Tints.

BY JOSEPH GRIGGS.

As requested by some of our subscribers, we shall, in the following, attempt to give a table for mixing colors and tints, but would preface the article by saying that it must not be expected that the formulas given will produce the exact effect desired, because the strength of the various brands of colors varies to a great extent, and therefore the painter must exercise his own judgment. The table is to simply give an idea of what can be produced by following the formulas given, when chemically pure material is employed in the mixing. It is also recommended that the parts mentioned be weighed out in paste form, and the white or black and each color separately thinned and strained before mixing them together, because the arriving at the proper hue of color or depth and tone of tint will be simplified by using that precaution. By thinning we do not mean that they should be quite ready for application, but of such consistency that they will pass an ordinary strainer with the aid of a brush.

Unless otherwise indicated, the materials are understood to be ground fine in oil in paste form.

GROUNDS FOR GRAINING COLORS.

Ash Ground: 400 parts white lead, 4 parts French ochre, 1 part raw Turkey umber.

Cherry Ground: 100 parts white lead, 5 parts brunt sienna, 1 part raw sienna.

Light Maple Ground: 100 parts white lead, 1 part French ochre.

Dark Maple Ground: 100 parts white lead, 1 part dark golden ochre.

Light Oak Ground: 50 parts white lead, 1 part French ochre.

Dark Oak Ground: 50 parts white lead, 1 part dark golden ochre.

Mahogany Ground: 10 parts white lead, 5 parts orange chrome and 1 part brunt sienna.

Rosewood Ground: Drop black.

Walnut Ground: 50 parts white lead, 3 parts dark golden ochre, 1 part dark Venetian red and 1 part drop black.

POSITIVE COLORS.

Blue Black A: 9 parts lampblack, 1 part Chinese or Prussian blue.

Blue Black B: 19 parts drop black, 1 part Prussian blue.

Bright Mineral: 9 parts light Venetian red, 1 part red lead.

Brilliant Green: 9 parts paris green, 1 part C. P. chrome green, light.

Bronze Green, Light: 3 parts raw Turkey umber, 1 part medium chrome yellow.

Bronze Green, Med.: 5 parts medium chrome yellow, 3 parts burnt Turkey umber, 1 part lampblack.

Bronze Green, Dark: 20 parts drop black, 2 parts medium chrome yellow and 1 part drak orange chrome.

Bottle Green: 5 parts commercial chrome green, medium, and 1 part drop black.

Brown Stone: 18 parts burnt umber, 2 parts dark golden ochre and 1 part ournt sienna.

Cherry Red: Equal parts of best imitation vermilion and No. 40 carmine.

Citron A: 3 parts medium chrome yellow and 2 parts raw umber.

Citron B: 6 parts commercial chrome green, light, and 1 part medium chrome yellow.

Coffee Brown: 6 parts burnt Turkey umber, 2 parts French chrome and 1 part burnt sienna.

Emerald Green: Use paris green.

Flesh Color: 19 parts French ochre, 1 part deep English vermilion.

Fern Green: 5 parts lemon chrome yellow and 1 part each of light chrome green and drop black.

Foliage Green: 3 parts medium chrome yellow and 1 part of ivory or drop black.

Foliage Brown: Equal parts of Vandyke brown and orange chrome yellow.

Golden Ochre: 14 parts French yellow ochre and 1 part medium chrome yellow for the light shade, and 9 parts Oxford ochre and 1 part orange chrome yellow for the dark shade.

Gold Russet: 5 parts lemon chrome yellow and 1 part light Venetian red.

Gold Orange: Equal parts of dry orange mineral and light golden ochre in oil.

Indian Brown: Equal parts of light Indian red, French ochre and lampblack.

Mahogany, Cheap: 3 parts dark golden ochre and 1 part of dark Venetian red.

Maroon, Light: 5 parts dark Venetian red, 1 part drop black.

Maroon, Dark: 9 parts dark Indian red, 1 part lampblack.

Olive Green: 7 parts light golden ochre, 1 part drop black.

Ochrous Olive: 9 parts French ochre, 1 part raw umber.

Orange Brown: Equal parts burnt sienna and orange chrome yellow.

Oriental Red: 2 parts Indian red, light, in oil; 1 part dry red lead.

Purple: 2 parts rose pink, 1 part ultramarine blue.

Purple Black: 3 parts lampblack and 1 part rose pink, or 9 parts drop black and 1 part rose pink.

Purple Brown: 5 parts Indian red, dark, and 1 part each of ultramarine blue and lampblack.

Roman Ochre: 23 parts French ochre and 1 part each burnt sienna and burnt umber.

Royal Blue, Dark: 18 parts ultramarine blue and 2 parts Prussian blue. To lighten use as much white lead or zinc white as is required.

Royal Purple: 2 parts ultramarine blue, 1 part No. 40 carmine or carmine lake.

Russet: 14 parts orange chrome yellow and 1 part C. P. chrome green, medium.

Seal Brown: 10 parts burnt umber, 2 parts golden ochre, light, 1 part burnt sienna.

Snuff Brown: Equal parts burnt umber and golden ochre, light.

Terra Cotta: 2 parts white lead, 1 part burnt sienna, also 2 parts French ochre to 1 part Venetian red.

Turkey Red: Strong Venetian red or red oxide.

Tuscan Red: Ordinary—9 parts Indian red to 1 part rose pink. Brilliant—4 parts Indian red to 1 part red madder lake.

Violet: 3 parts ultramarine blue, 2 parts rose lake, 1 part best ivory black.

Yellow, Amber: 10 parts medium chrome yellow, 7 parts burnt umber, 3 parts burnt sienna.

Yellow Canary: 5 parts white lead, 2 parts permanent yellow, 1 part lemon chrome yellow.

Yellow, Golden: 10 parts lemon chrome yellow, 3 parts orange chrome, dark, 5 parts white lead.

Yellow, Brimstone: 3 parts white lead, 1 part lemon chrome yellow, 1 part permanent yellow.

BLUE TINTS.

Azure Blue: 50 parts white lead, 1 part ultramarine blue.

Blue Gray: 100 parts white lead, 3 parts Prussian blue, 1 part lampblack.

Bright Blue: 20 part zinc white, 1 part imitation cobalt blue.

Blue Grass: 7 parts white lead, 2 parts Paris green, 1 part Prussian blue.

Deep Blue: 15 parts white lead, 1 part Prussian blue or Antwerp blue.

French Blue: 5 parts imitation cobalt blue, 2 parts French zinc white.

Green Blue: 100 parts white lead, 5 parts lemon chrome yellow, 3 parts ultramarine blue.

Hazy Blue: 60 parts white lead, 16 parts ultramarine blue, 1 part burnt sienna.

Mineral Blue: 5 parts white lead, 4 parts imitation cobalt blue, 2 parts red madder lake, 1 part best ivory or drop black.

Orient Blue: 25 parts white lead, 2 parts Prussian blue, 1 part lemon chrome yellow.

Royal Blue: 34 parts white lead, 19 parts ultramarine blue, 2 parts Prussian blue, 1 part rose madder or rose lake.

Sapphire Blue: 2 parts French zinc white and 1 part best Chinese blue.

Sky Blue: 100 parts white lead, 1 part Prussian blue.

Solid Blue: 5 parts white lead, 1 part ultramarine blue.

Turquoise Blue: 20 parts white lead, 1 parts ultramarine blue, 1 part lemon chrome yellow.

YELLOW TINTS.

Bronze Yellow: 5 parts white lead, 6 parts med. chrome yellow, 1 part raw umber.

Buff: 3 parts white lead, 1 part Oxford ochre.

Canary Yellow: 25 parts white lead, 1 part lemon chrome yellow.

Colonial Yellow: 80 parts white lead, 2 parts French ochre, 1 part lemon chrome yellow.

Copper: 25 parts white lead, 3 parts medium chrome yellow, 3 parts light Venetian red, 1 part raw umber.

Cream, Light: 100 parts white lead, 3 parts French ochre, 2 parts lemon chrome yellow.

Cream, Dark: 40 parts white lead, 5 parts French ochre, 1 part medium chrome yellow.

Dark Buff: 3 parts white lead, 2 parts Oxford ochre.

Dutch Gold: 10 parts white lead, 7 parts dark golden ochre, 1 part burnt umber.

Flax: 35 parts white lead, 20 parts French ochre, 1 part drop black.

Gold, Imitation: 50 parts white lead, 3 parts medium chrome yellow, 1 part bright vermilion.

Limestone: 50 parts white lead, 3 parts Oxford ochre, 1 part medium chrome yellow.

Naples Yellow, Imitation: 100 parts white lead, 3 parts raw sienna, 1 part orange chrome yellow.

Pale Orange: 5 parts white lead, 1 part orange chrome yellow.

Stone Buff: Equal parts white lead and deep French ochre.

Sulphur Yellow: 2 parts white lead, 1 part zinc yellow.

Straw Yellow: 150 parts white lead, 5 parts French ochre, 1 part medium chrome yellow.

Spruce Yellow: 30 parts white lead, 5 parts French ochre, 2 parts light Venetian red, 1 part medium chrome yellow.

Venetian Yellow: 80 parts white lead, 3 parts medium chrome yellow, 1 part raw umber.

RED TINTS.

Cardinal Red: Equal parts of white lead and scarlet lake.

Carnation Red: 15 parts white lead, 1 part scarlet lake.

Coral Pink: 15 parts white lead, 2 parts bright vermilion, 1 part deep orange chrome.

Deep Rose: 10 parts white lead, 1 part red lake.

Deep Purple: 5 parts white lead, 1 part ultramarine blue, 1 part rose pink.

Deep Scarlet: 15 parts bright vermilion, 2 parts red lake, 5 parts white lead.

Flesh Pink: 100 parts white lead, 1

part orange chrome yellow, 1 part red lake.

Indian Pink: 100 parts white lead, 1 part light Indian red.

Lavender: 50 parts white lead, 2 parts ultramarine blue, 1 part red lake.

Light Pink: 50 parts white lead, 1 part bright vermilion.

Lilac: 50 parts white lead, 1 part best rose pink.

Mauve: 15 parts white lead, 2 parts ultramarine blue, 1 part carmine lake or red lake.

Orange Pink: 2 parts white lead, 1 part dark orange chrome or American vermilion.

Purple: 5 parts white lead, 2 parts ultramarine blue, 1 part red madder lake.

Royal Pink: 5 parts white lead, 1 part carmine lake or red madder lake.

Royal Rose: 20 parts white lead, 1 part rich rose lake.

Red Brick: 10 parts white lead, 3 parts light Venetian red, 1 part yellow ochre.

Reddish Terra Cotta: 2 parts white lead, 1 part rich burnt sienna.

Salmon: 50 parts white lead, 5 parts deep orange chrome.

Shell Pink: 50 parts white lead, 2 parts bright vermilion, 1 part orange chrome, 1 part burnt sienna.

Violet: 15 parts white lead, 4 parts ultramarine blue, 3 parts rose lake, 1 part drop black.

GREEN TINTS.

Apple Green: 50 parts white lead, 1 part chrome green, light or medium shade.

Citrine Green: 100 parts white lead, 2 parts medium chrome yellow, 1 part drop black.

Citron Green: 100 parts white lead, 3 parts medium chrome yellow, 1 part lampblack.

Emerald Green: 10 parts white lead, 1 part Paris green (emerald green).

Grass Green: 5 parts white lead, 7 parts Paris green.

Gray Green: 5 parts white lead, 1 part Verona green.

Marine Green: 10 parts white lead, 1 part ultramarine green.

Nile Green: 50 parts white lead, 6 parts med. chrome green, 1 part Prussian blue.

Olive Green: 50 parts white lead, 2 parts medium chrome yellow, 3 parts raw umber, 1 part drop black.

Olive Drab: 50 parts white lead, 8 parts raw umber, 5 parts medium chrome green, 1 part drop black.

Pea Green: 50 parts white lead, 1 part light chrome green.

Satin Green: 3 parts white lead, 1 part Milori green.

Sage Green: 100 parts white lead, 3 parts medium chrome green, 1 part raw umber.

Sea Green: 50 parts white lead, 1 part dark chrome green.

Stone Green: 25 parts white lead, 2 parts dark chrome green, 3 parts raw umber.

Velvet Green: 20 parts white lead, 7 parts medium chrome green, 2 parts burnt sienna.

Water Green: 15 parts white lead, 10 parts French ochre, 1 part dark chrome green.

BROWN TINTS.

Chocolate: 25 parts white lead, 3 parts burnt umber.

Cocoanut: Equal parts white lead and burnt umber.

Cinnamon: 10 parts white lead, 2 parts burnt sienna, 1 part French ochre.

Dark Drab: 40 parts white lead, 1 part burnt umber.

Dark Stone: 20 parts white lead, 1 part raw umber.

Fawn: 50 parts white lead, 3 parts burnt umber, 2 parts French ochre.

Golden Brown: 25 parts white lead, 4 parts French ochre, 1 part burnt sienna.

Hazel Nut Brown: 20 parts white lead, 5 parts burnt umber, 1 part medium chrome yellow.

Purple Brown: 50 parts white lead, 6 parts Indian red, 2 parts ultramarine blue, 1 part lampblack.

Seal Brown: 30 parts white lead, 5 parts burnt umber, 1 part medium chrome yellow.

Snuff Brown: 25 parts white lead, 1 part burnt umber, 1 part Oxford ochre.

GRAY TINTS.

Ash Gray: 30 parts white lead, 2 parts ultramarine blue, 1 part burnt sienna.

Cold Gray: 500 parts white lead, 6 parts lampblack, 1 part Antwerp blue.

Dove Gray: 200 parts white lead, 5 parts ultramarine blue, 2 parts drop black.

French Gray: 150 parts white lead, 2 parts lampblack, 1 part orange chrome yellow, 1 part chrome red (American vermilion).

Lead Color: 50 parts white lead, 1 part lampblack (increase proportion of white lead for light tints).

Lustrous Gray: 10 parts white lead, 1 part graphite (plumbago).

Olive Gray: 200 parts white lead, 2 parts lampblack, 1 part medium chrome green.

Pure Gray: 100 parts white lead, 1 part drop black.

Pearl Gray: 100 parts white lead, 1 part ultramarine blue, 1 part drop black.

Silver Gray: 150 parts white lead, 2 parts lampblack, 3 parts Oxford ochre.

Warm Gray: 100 parts white lead, 3 parts drop black, 2 parts French ochre, 1 part light Venetian red.

Note.—For inside work and whenever desirable, the white lead may be replaced by zinc white or a mixture of the two white pigments may be used. Be it also remembered that pure colors, as a rule, will produce the clearest tints and that fineness of grinding is an important factor. It will not be amiss to call attention to the fact that the excessive use of driers, especially of dark japans or liquid driers, with delicate tints, is bad practice, and liable to ruin otherwise good effects in tints or delicate solid colors.—Painters Magazine.

Colored Paper Pigments

For the manufacture of stained paper, lakes are exclusively employed. The pigments most in use are

Ponceaus for lakes, croceine, croceine orange, orange II, naphthalene yellow, Indian yellow, acid green, acid violet, sea blues, victoria blue, induline, rose induline, amaranth, naphthalene black, basic dyestuffs in general, resorcine colors, eosines. For the lakes with basic pigments precipitate with tannins and sodium acetate. Dissolve the dyestuff in the necessary quantity of water (e. g. 5 grains of pigment to a liter of not or boiling water)—condensation water is employed with preference. The dyestuff solution is put into a vessel of wood, porcelain or earthenware. Metal vessels have to be avoided, as they dim the lakes very much, but enameled cast iron vessels are excellent for use in the manufacture of lakes.

The barium sulphate is slowly and with constant stirring added to the dyestuff solution. Blanc fix, aluminum hydrate or caolinx may also be used in its place. Now add the tannine solution in the cold, with constant stirring. Prepare same by dissolving very pure tannine (ether-tannine) in water in the proportion of 100 grains of tannine per liter of water. It is a rule that in the case of basic dyes two grains of tannine are required for every grain of dyestuff. Now enter the sodium acetate until the pigment is completely precipitated, which is easily ascertained by putting a drop on filtering paper. The ring formed by the water should be entirely light, i. e., colorless. If it should still show color, add a little more sodium acetate. Allow to settle, draw off the liquid, filter and wash. Then dry, by spreading the lake in thin layers on wooden frames covered with thin material or what is by far better, on porous gypsum plates, made at home.

For this purpose, take wooden frames about 1 meter in length, 30 centimeters high and 50 centimeters broad. Place them on a very smooth surface, e. g., a board greased with oil, or on a marble slab, pour gypsum into the frame and allow to dry in the air. Great heat in drying the gypsum, such as direct rays of the sun or drying in the drying chamber, must be avoided. After the gypsum has dried out well, which takes eight to ten days, dry in the drying chamber, slowly raising the temperature to 60° C., allow to cool, and finally heat again to 80° C., to eliminate the last drop of water.

On these plates the lakes dry very quickly and retain their entire brilliancy, which otherwise they generally lose if they are dried for a long time.

The lakes prepared for ponceaus and from the eosines require a particularly quick drying.

It is not necessary for most lakes to give the precipitating method for each of the dyestuffs, as the dyestuffs of the same group precipitate in the same manner.

For the eosine lake mix the dyestuff solution with the blanc fix and precipitate afterward with a lead nitrate solution. For the other operations see basic dyes.

For the ponceaus and other acid dyes mix the dyestuff solution with the aluminum sulphate solution and precipitate subsequently with barium chloride. Finally aluminum hydrate is formed by the addition of sodium carbonate. These lakes must always remain somewhat acid and it must be avoided to add too much sodium carbonate. An excess of barium chloride produces gritty lakes which are hard to apply. For extending the lakes, aluminum hydrate blanc fix or any other insoluble body is used.

Basic Dyestuffs—Example I.—Thioflavine T 0.2 gram, brilliant green 1.8 gram, barium sulphate 93 grams, tannine solution (proportion 1 : 10) 40 ccm., sodium acetate solution (proportion 1 : 10) 8 ccm. Example II.—Cerise I 20 grams, Bismarck brown GG 1 gram, methyl violet 2B 1 gram, barium sulphtae 33 grams, tannine solution (proportion 1 : 10) 40 ccm., sodium acetate solution (proportion 1 : 10) 100 ccm. Example III.—Methyl-blue NGG 0.5 gram, brilliant green 0.1 gram, blanc fix 100 grams, tannine solution (proportion 1 : 10) 40 ccm., sodium acetate solution 10 ccm.

Eosine, Eosine Lake.—Eosine RGP 1 gram, fluoresceine 0.5 gram, blanc fix 100 grams, lead nitrate 2 grams.

Acid Dye Lakes—Example I.—Indian yellow 20 grams, aluminum sulphate solution (proportion 1 : 10) 500 ccm., barium chloride solution (proportion 1 : 10) 600 ccm., sodium carbonate solution (proportion 1 : 10) 100 ccm. Example II.—Ponceaus IIR 5 grams, aluminum sulphate solution (proportion 1 : 10) 125 ccm., barium chlorate solution (proportion 1 : 10) 150 ccm., sodium carbonate solution (proportion 1 : 10) 25 ccm.—Farben Zeitung.

(Special Correspondence to the Reporter.)

Philadelphia Chemical Market.

Philadelphia, June (?), 1899.

ALKALI.—The demand for immediate delivery continues good, with domestic makers well sold up, and resulting in considerable business being done from second hands at .85@.90c. for high test on spot. Usual advance for 48%. Forward deliveries are meeting with considerable inquiry, and holders are naming .67½@.72½c. f. o. b. works for high test in bags. The demand for B. M. & Co.'s is improving, and high test is quoted on spot at .85@.90c., as to quantity.

CAUSTIC SODA—Is in moderate demand, with 1.55@1.60c. named for high test. For future shipments 1.47½@1.52½c. f. o. b. works is quoted.

SAL SODA—Is becoming scarcer, owing to the warm weather, and holders are now firm in their views at .55@60c., as to quantity. Foreign is also in good demand at .72½@.77½c. on spot, and .65@.70 for shipments.

BLEACHING POWDER—Is quiet at the moment and fair supplies to draw on. Holders are naming 1½@1.55c. Prime Liverpool makes can be had at 1.45@1½c. for shipment.

NITRATE OF SODA — Continues firm, but for prompt delivery little is doing. Spot goods are held at 1.70@1¾c., and to arrive 1.65@1.70c. will buy. Shipments are quoted at 1⅝@1.65c., as to date of sailing.

Formula for Calculating the Contents of Glycerin in Crude Glycerin.*

BY ALFRED SMETHAM, F. I. C.

Under the heading "Glycerin Estimation," there appeared in the Journal of the Society of Chemical Industry, 1898, page 330, a paper by Richardson and Jaffe, in which, after much interesting matter regarding the composition and analysis of spent lyes and crude glycerin, is given a formula by which, from the specific gravity and the percentage of ash, the contents of glycerin may be calculated with approximate accuracy.

As I had more than a year previously worked out and systematically used a somewhat similar formula, I was much interested in the results obtained by Messrs. Richardson and Jaffe, the more so as, in the main, the formula I had devised was in accordance with that published by them, although the one I had adopted was simpler and avoided reference to published tables of specific gravity of glycerin.

The formula which I had been using was as follows:

$$\text{Glycerin} = \frac{(G - 1{,}000) - (A \times 8.8)}{2.66}$$

where G = specific gravity at 60 deg. (water 1,000), and A represents the ash obtained by gentle ignition.

In working out this formula, the only method to adopt was that of experiment, partly because the salts existing in crude glycerin are diverse and variable in amount, and partly because the increased gravity is not wholly due to mineral constituents. Messrs. Richardson and Jaffe have made an attempt to differentiate between the increase of gravity due to organic or inorganic impurities, but in this respect I venture to think that they have introduced, without any sufficient reasons, an unnecessary complication, which, in certain instances, must have a direct tendency to error. They propose to deduct from the gravity 0.012 for crude glycerins containing 78—83 per cent. of glycerin, 0.015 for those yielding between 65—77 per cent., and 0.023 for those between 50—60 per cent., to compensate for the organic impurities, and to add to these constants the percentage of ash × 0.0073. The sum is then deducted from the original gravity and the percentage of glycerin found by reference to a published table.

No doubt, in many instances, the poorer the glycerin the larger will be the percentage of organic impurities present; but in samples from the same source the reverse would be the case. Take, for example, the case of a crude glycerin at 80 per cent., watered down to 60 per cent. It is obvious that in that case the correction for organic impurities (and salts) would be less after watering than before, and consequently, if the correction is to be made variable for different strengths, it should be inversely that given by Messrs. Richardson and Jaffe. But even if it be argued that watering does not take place in practice, the same reasoning would hold good so far as the organic impurities are concerned during concentration. In the preparation of crude glycerin, the greater portion of the organic impurities are, or should be, removed before the concentration begins, and after the salting point is reached only insignificant quantities of organic matters are removed with the salt. It therefore follows that the higher the concentration of the glycerin the greater will be the percentage of organic impurities, and the greater, and not less, will be the correction.

These facts are important because the method of calculation is only, at best, a rough check upon the more exact estimation of glycerin in samples of unknown origin; but the process is of distinct advantage in the processes of glycerin refining where it is desirable to keep a fairly accurate control over the production.

In a soap factory where the demand for given kinds of soap is fairly constant, the composition of the mixed spent lyes does not vary much throughout the year, and with the same treatment on concentration there will be very little difference in the proportion of organic impurities to glycerin. The proportion of water and of salt varies continually, and it is for ready reference as to the degree of concentration that the formula for calculating the percentage of real glycerin is chiefly useful. Hence, it may be found that in certain exceptional cases the formula which I have found to yield fairly accurate and consistent results might require slight modification to meet altered conditions; but from my general experience, it appears to yield accurate results with crude glycerin prepared from spent soap lyes by the generally adopted processes.

Needless to say, great care must be exercised in the estimation of the ash and of the specific gravity. An error of 1-10 per cent. in the ash or of 0.001 in the gravity represents about 1-3 per cent. of glycerin; and it can readily be seen that should the errors be in the same direction the difference may be great, without any very glaring errors in the estimation.

Owing to the fusible character of the ash, it is very difficult to obtain accurate results unless very great care be exercised. The method given by Messrs. Richardson and Jaffe, by which the sample is evaporated, charred at a low temperature, lixiviated, and the insoluble carbonaceous residue ignited and the solution evaporated in the same capsule and again ignited, yields accurate results if carefully performed, so as to avoid decrepitation of salt. But equally satisfactory results are obtainable by direct ignition, provided sufficient time be allowed and the heat properly regulated over an Argand burner. Any attempt to hurry the estimation may yield erroneous results.

The determination of the specific gravity also requires care. The samples being very viscous, and the coefficient of expansion high, it is necessary to give time for the removal of bubbles of air, and care must be taken to ascertain the exact temperature at the time of weighing. I find that a specific gravity bottle is the most convenient and most accurate method to adopt.

In the estimation of the glycerin, the method adopted has been throughout the bichromate process, carried out exactly as described by Hehner (this Journal, 1889, 4—9). Tested against pure samples of glycerin and artificial

*Paper read before the Liverpool section of the Society of Chemical Industry.

mixtures approximating in composition to crude glycerin, the process yields practically theoretical results, and for general purposes with all ordinary samples of crude glycerin yields concordant and satisfactory results.

The following results show the probable variations between the calculated and estimated percentage of glycerin:

Sp. Gr. at 60° F.	Ash.	Calculated % of Glycerin.	Estimated % of Glycerin.	Error.
1.3004	9.26	82.32	82.72	— 0.40
1.3082	9.86	83.25	83.01	+ 0.24
1.2989	9.32	81.56	81.03	+ 0.53
1.2974	9.60	80.04	81.34	— 1.30
1.2940	10.08	77.18	77.63	— 0.45
1.2920	10.30	75.70	76.46	— 0.76
1.3010	9.71	81.03	80.28	+ 0.75
1.2970	9.41	80.52	80.84	— 0.32
1.2930	9.09	80.07	78.55	+ 1.52
1.2970	9.76	79.36	80.01	— 0.65
1.3010	9.44	81.93	81.54	+ 0.41
1.2950	9.40	79.80	79.82	— 0.02
1.3070	10.35	81.17	80.80	+ 0.37
1.3040	9.85	81.70	80.85	+ 0.85
1.2980	9.53	80.50	80.24	+ 0.26
1.3010	9.78	80.80	80.85	— 0.05
1.3120	10.94	81.10	80.42	+ 0.78
1.3010	9.39	82.09	81.03	+ 1.06
1.3020	9.58	82.33	81.28	+ 1.05
1.2890	8.21	80.96	80.60	+ 0.36
1.3130	10.12	81.56	81.25	+ 0.31
1.2962	9.53	79.82	79.51	+ 0.31
1.2960	9.54	79.71	79.49	+ 0.22
1.3050	9.78	82.30	80.96	+ 1.34
1.3020	10.29	79.49	79.19	+ 0.30
1.3020	9.56	81.91	81.86	+ 0.05
1.3030	10.16	80.30	81.32	— 1.02
1.3010	9.79	80.77	80.84	— 0.07
1.3020	9.68	81.51	82.05	— 0.64
1.3030	9.63	82.05	82.14	— 0.09
1.3000	9.68	80.75	80.52	+ 0.23
1.3005	9.23	82.43	82.92	— 0.49
1.3190	10.92	83.81	83.59	+ 0.22
1.3048	12.06	74.70	73.69	+ 1.01
1.2850	12.03	67.34	67.37	— 0.03
1.3006	9.853	80.34	80.17	

Looking Backwards in the Soap Trade.

The nineteenth century of the Christian era is rapidly drawing to a close. Probably there is no man engaged in the soap trade now living who can speak of the condition of the trade in the early years of the present century; certainly the writer cannot by a goodly proportion of that period. That there have been changes in the soap trade, as in other branches of trade, is obvious; the limited observation of only a user of soap will tell him that there is a wide difference between the soap of to-day and that of even forty years ago. The changes in the soap trade have been brought about by changes of two characters: first, in the raw materials at the service of the soap maker, and, second, in the processes and operations involved in the manufacture of the soap. One thing which must strike the user who in his mind compares the soap of to-day with that of a few years ago is its greater purity and improved quality. Let us briefly try to trace the changes which have brought this result about. At the beginning of this century the soap maker used soda and potash then, as now, for his alkalies. The soda was obtained from kelp, the ashes of seaweeds, and was known as barilla soda. The potash was got from the ashes of trees. Both alkalies were not remarkable for purity. They were full of impurities of one sort or another, and these often had no little effect on the quality of the soap; then it would have been a matter of impossibility for a soap maker to turn out a white soap such as he can readily make to-day. Caustic soda and caustic potash were not commercial articles, and the soap maker had to causticise his own alkalies, an operation which was not always perfectly carried out. The introduction of first the Leblanc soda process, and then the ammonia soda processes of Solvay and Mond, and the many improvements which have been effected in them has brought about great changes. As years have rolled on the soda made by these processes has completely ousted barilla soda, while the quality of the soda has materially improved, and now practically chemically pure soda is supplied to the soap maker. Then, again, the alkali maker began to manufacture caustic soda, and although at first the quality was not good, yet so many improvements have been made in its manufacture that the soap maker can buy chemically pure caustic at prices which in former days he would not dream of, with the result that now but few soap makers make their own caustic. It is the same in connection with the potash. The introduction of these pure alkalies has done much to make soapmaking more simple in its nature, and to improve the quality of the soap produced. Now we come to the fats, etc., used. First of all, we are struck with the increased number now used in soap making; during the century which is now passing away cottonseed oil, corn oil, nut oil, cocoanut oil, rosin, and others we might name have been added to the list of soap fats. Then, again, the various oils and fats are now supplied of a much purer quality than was formerly the case. So many improvements have been made in the processes of extracting and refining as to bring about this desirable result. Given then purer materials, it is no wonder that the soap maker of to-day can produce purer and better soaps than his predecessor of half a century ago. Then, again, in the processes of soap making there have been some changes. Steam has been substituted for fire with no little benefit as regards the appearance and quality of the soap. We have a better knowledge of the principles of soap making, so that we can make it more perfectly than formerly, while the greatly increased number of soap fats now available enables the soap maker to prepare many more varieties of soap than he formerly could do. Lastly, there is one change which must be alluded to—fifty years ago the soap maker threw away the glycerine which is formed as a bye-product during the process of making soap, now he recovers it all, and gets a good price for it.—Oil and Colorman's Journal.

Comparative Stocks of Lard.

The Cincinnati Price Current submits the following comparisons of stocks of lard on June 1 for the years mentioned, held in Chicago and New York, and reported in European markets and afloat, with totals, represented in tierces:

	Chicago.	N.York.	Europe, etc.	Total.
1882.....	147,500	35,200	94,200	276,900
1883.....	140,300	23,900	83,700	247,900
1884.....	124,500	35,000	84,500	244,000
1885.....	91,100	34,500	102,900	228,500
1886.....	86,300	35,500	101,500	223,300
1887.....	109,400	39,300	85,500	234,200
1888.....	44,800	17,900	66,100	128,800
1889.....	35,500	19,800	73,500	128,800
1890.....	75,600	35,100	141,000	251,700
1891.....	167,200	74,900	272,500	514,600
1892.....	65,100	23,800	144,500	233,400
1893.....	22,800	10,200	81,500	114,500
1894.....	22,400	10,100	89,500	122,000
1895.....	83,300	16,200	166,000	265,500
1896.....	227,900	23,600	224,500	476,000
1897.....	275,500	15,100	264,000	554,600
1898.....	114,000	18,600	178,000	310,600
1899.....	173,200	15,300	170,000	358,500

The above shows visible stocks of lard this season to be 48,000 tierces more than a year ago, and 90,000 more than the average for June 1 for seventeen years previous to this season. Compared with a month ago there is an increase of 20,000 tierces.

The aggregate stocks of lard, as mentioned the first of each month for years stated, compare as follows, represented in tierces:

	1899.	1898.	1897.	1896.	1895.
January..	276,000	361,000	472,000	287,000	165,000
February.	327,000	403,000	519,000	344,000	185,000
March....	339,000	396,000	522,000	367,000	226,000
April.....	348,000	340,000	507,000	397,000	265,000
May.....	338,000	296,000	523,000	414,000	258,000
June.....	358,000	310,000	554,000	476,000	265,000
July.....	....	383,000	566,000	557,000	289,000
August...	....	385,000	549,000	596,000	314,000
September	....	373,000	522,000	551,000	273,000
October...	....	365,000	481,000	510,000	247,000
November	....	298,000	399,000	480,000	216,000
December.	....	272,000	353,000	467,000	250,000

A Printing Ink Combine.

Representatives of the leading printing ink manufacturing concerns of the country have completed the organization of an ink trust, with a capital of $18,500,0000. The new organization is to be known as the Federal Printing Ink and Supply Company. Of the capital of $18,500,000, $3,500,000 will be in 7 per cent. cumulative preferred stock and $15,000,000 in common stock. Five hundred thousand dollars of the preferred stock and $1,000,000 of the common stock will be held in the company's treasury. The trust is said to hold options on the following companies, all of which will be members of the trust: Binney & Smith, the Fred H. Levey Company, Ault & Wiborg, the Sigmund Ulman Company, W. H. H. Carter, the W. D. Wilson Printing Ink Company, St. Clair & Valentine, James Lyons, Philip Ruxton, the Wallace Walker Company, of New York; George H. Morrill & Co., New York and Boston; J. Harper Bonnell, New York and Chicago; Jaenecke Printing Ink Company, Newark, N. J.; Charles E. Johnson, F. E. Okie & Co., John Woodruff's Sons, and the L. Martin Company, of Philadelphia; Eclipse Printing Ink Company of Franklin, Pa.; F. H. Barnard & Son and G. B. Kane & Co. of Chicago; the Standard Printing Ink Company, the Queen City Printing Ink Company, of Cincinnati, New York and Middletown, Conn.; the Thalmann Company of St. Louis, the California Ink Company of San Francisco, the Buffalo Printing Ink Works of Buffalo, the Carbon Manufacturing Company, Limited, of Kane, Pa.; the American Carbon Black Company of Warren, Pa.; the Castle Brook Carbon Black Company of Sargent, Pa.; the West Carbon Black Company of Kane, Pa.; the Penn Carbon Company of Erie, Pa.; G. W. Beacon of Mount Jewett, Pa.; the Columbia Carbon Company of Williamsport, Pa.; the Southern Carbon Company of Naugatuck, West Va.; the Raven Gas Black Company of Eaton, Ind.; Wood & Co. of Dunkirk, Ind., and the Akron Chemical Company of Akron, Ohio.

The officers of the trust are: L. A. Ault of the Ault-Wiborg Company, president; Frederick H. Levey of the F. H. Levey Company, first vice-president; W. E. Webber of the Charles E. Johnson Company, Philadelphia, second vice-president; Edmund J. Shattuck of George H. Morrill & Co., Boston, treasurer, and E. H. Murdock, president of the Ebony Lampblack Company, Cincinnati, secretary.

Potash and Soda Salts from Natural Decomposition of Lead Slags

BY MALVERN W. ILES AND CHAS F. SHELBY.

For a number of years there has been noticed at and near the bottom of the slag dumps of the works of the Globe Smelting & Refining Company, at Denver, Colo., a white efflorescent salt of a hitherto unknown chemical composition. Since the amount of this substance was quite insignificant, and a carefully conducted analysis would partake of the nature of a scientific research, with little hope of commercial gain, we delayed making a careful study of the chemical composition of the product. This salt is more noticeable on the older and more weathered portions of the slag dump. It has a greyish white color, frequently tinged with brown or red.

The geologist will here find ample material for speculative thought, as doubtless the same chemical changes are now taking place, and have been going on for many geological eras with natural silicates. We will give here only a plain statement of the facts such as we have found them.

This whitish efflorescent salt is more noticeable on the undersides of overhanging projections, and it was from one of these places our sample was obtained by carefully chipping off small pieces of the slag that were covered or encrusted with this salt. Since the salt was discovered to be readily soluble in water, we transferred portions of the encrusted slag to a large porcelain casserole, and carefully digested to solution of the white material by the use of pure distilled water; then filtered and evaporated to dryness and submitted the resultant residue to analysis after trituration in an agate mortar.

The result of the analysis gave the following substances, without showing the probable state of combination:

Sulphuric anhydride (SO_2)	48.45
Potassic oxide (K_2O)	28.44
Sodic oxide (Na_2O)	13.48
Calcic oxide (CaO)	1.80
Magnesia oxide (MgO)	1.08
Ferric oxide (Fe_2O_3)	0.29
Manganous oxide (MnO)	0.26
Chlorine (Cl)	0.47
Loss on ignition	2.40
Total	96.67

The result of the analysis gave the following

Of the total amount (96.67 per cent.) there was found to be 48.92 per cent. existing as acids and 47.75 per cent. as bases.

In accordance witht our best judgment the various substances existed in a state of combination as follows:

Potassium sulphate	52.64
Sodium sulphate	29.97
Sodium chloride	0.77
Calcium sulphate	4.37
Magnesium sulphate	3.24
Ferric sulphate	0.73
Manganous sulphate	0.56
Sulphuric anhydride in combination with other bases	1.89
Loss on ignition	2.40
Total	96.57

The difference of 0.10 per cent. between this last named total and that stated for the total of the bases and acids, is due to the sacrificing of 0.10 per cent. of oxygen from the sodic oxide in forming sodium chloride.

There is 3.43 per cent. of something unaccounted for, which we can not find, although diligent search has been made. Having satisfied ourselves with the accuracy of the results given above, we are led to state that in all probability it may consist of some or all of the other alkalies, lithium, caesium or rubidium combined with sulphuric acid. In confirmation with this statement attention is directed to the fact that the analysis reveals the fact that there is 1.89 pr cent. of sulphuric anhydride not needed for combination with the bases found. We have not the facilities for making a spectroscopic examination of this product. Very recently some very surprising physical properties of slag were noticed which were directly attributable to the high percentage of the alkaline earths, potash and soda; but as these interesting and useful observations have a distinctively metallurgical bearing, we will not digress from the scope of this paper.

The thought instinctively presents itself whether the old slag dumps of the Western lead smelters may not be used at some future time as a source of the valuable potash salts, and that although there is even now slow liberation of potash salts going on, yet it is wholly within the power of chemistry to hasten the operation.

The ores from Cripple Creek are found to be the chief source for both potash and soda.

Aside from the physical properties of slags containing much potash and soda, which we have incidentally mentioned to exist, we now find it has likewise a commercial bearing. Chemical literature is filled with instances where purely scientific studies have yielded a rich harvest for the industries of man.—Engineering and Mining Journal.

Economy in Cotton Baling.

Twenty-five years have done a good deal in the way of improving the Southern cotton bale, but previous progress has all been discounted by what has been accomplished within the past two or three years by the Lowry press. The Lowry bale, both in its form and in the principle involved in producing it, is a distinct and radical departure from all of the traditions of baling fibres. In form the bale is 36 inches long by 18 inches in diameter, and its density is 47 pounds to the cubic foot, as compared with a density of about 12½ pounds in the old plantation bale. The saving in space either on shipments or storage of the cotton is a very large item, and one which will result in getting a better rate on cotton from the inland as well as the ocean transportation companies. In addition to this, the superior condition in which the cotton is delivered to spinners will give it an advantage in price over the old form of bale. The recent fire tests at Boston showed the Lowry bale to be less hazardous than any other form of bale, and it is expected that lower insurance rates on cotton will follow these experiments. The Lowry press occupies but 10x6 feet of floor space, and requires less than 15 horse power to operate. Planters and ginners who contemplate adding this improvement to their gins will find in the card of the Planters' Compress Company, on another page of this issue, a list of the territorial agencies from which all desired information can be obtained.

Mica Fields in China.

Consul Fowler sends from Chefoo, under date of March 20, 1899, a letter from Mr. F. H. Chalfant, of Wei-hsien, in regard to the mica fields in Shantung discovered by him. The letter reads, in part:

In 1893 (I believe it was), I first heard through the Chinese that mica was mined in Chü-Ch'eng. I at once sent a reliable man, with instructions to buy me a donkey load, but not to say it was for a foreigner. He happened to reach the place during the wheat harvest, when the people said it did not pay to work the mines. He brought me what they had left over, after the best had been picked out by petty dealers, at the rate of 5 cash per catty.* This was in the rough. I knew that it would never do to give the men an idea that there was any demand for the mica by foreigners, for then the price would jump up to a prohibitory figure. A year later I arranged with Mustard & Co. (Shanghai) to forward a sample of the mica to the United States for inspection. I sent them 200 pounds of the rough material, but was again unfortunate in finding the mines idle. The villagers told my messenger to go further southeast, toward the seacoast, to obtain the best quality. He was limited in time and returned with what he could produce at the nearest place. This proved to be very poor quality. I told the Mustards the circumstances and indicated the danger of stirring up the avarice of the people residing in the mica district before they had secured an option upon a large tract of mica-bearing land. They saw the force of this. I fear the poor quality of the mica I was compelled to send them discouraged their United State correspondents, for I never had a report upon it, though they paid the expense of the experiment.

Aside from this effort nothing has been done. In the summer of 1895 an Englishman, Captain O'Sullivan by name, called at Wei-hsien. I gave him all the information I could about the mica region. He went to Pekin and Tientsin and tried to get a permit from Li Hung Chang to open a mine. Nothing came of it. Next, the Germans occupied the country adjacent to the mica region. One of their engineers, or rather mineralogists, was here not long ago, and I told him what

*Note by Consul.—1 catty=1⅓ pounds; 800 cash=$1 Mexican; say, 25 cents in United States currency per 100 pounds.

I knew about the mica deposits. He said he would investigate. I have no pecuniary interest in the business (should any ever be developed), but feel that there ought to be some prospecting for the benefit of the world at large.

(Special Correspondence to the Reporter.)

Revenue Tax on Chewing Gum.

Washington, May 16, 1899.

The Internal Revenue Bureau has decided to take summary action in the case of a considerable number of manufacturers of chewing gum who have failed to comply with the law levying a tax upon this article. In the majority of instances the delinquency has consisted in sending out large quantities of gum as free samples without stamping same, or in selling the gum at wholesale to be distributed as a gratuity in connection with other goods. In all these cases the Commissioner has deided to levy assessments on the manufacturer which will, in defaut of payment, be collected in the summary manner provided by the revenue laws, such tax in default operating as a lier upon the property of the manufacturers.

An impression seems to be current among manufacturers that varieties of chewing gum claimed to have medicinal properties are exempt from taxation when sent out as free samples, whether the manufacturer distributes them gratuitously or sells them for free distribution by others. An important case in point has been raised in New York, the facts, together with the decision of the Department being set forth in the following letter to the collector in that city:

"In reply to your letter in which you state that a certain gum company in New York have been furnishing the manufacturers of the General Arthur brand of cigars with small unstamped pasteboard packages, each containing ten tablets of chewing gum, for which the last named company paid $3.09 per thousand boxes, you are advised that the regulations relating to medicinal preparations, perfumery and cosmetics, Circular No. 501, Revised, dated Jan. 24, 1899, page 7, relating to free samples, do not apply to chewing gum. The regulations relate to tax on chewing gum, or substitutes therefor, as contained in Department Circular No. 120, under date of June 27, 1898, have not been modified and require that samples for salesmen, or for mailing, or for free distribution, shall be taken only from packages which have been duly stamped.

"To each box, carton, jar, or other package containing chewing gum of not more than one dollar of actual retail value, the manufacturer is required to affix a 4-cent stamp. If such package exceeds one dollar of retail value, for each additional dollar, or fractional part thereof, the manufacturer is required to affix an additional 4-cent stamp to such package.

"The office would be pleased to have you furnish it with several samples of this small pasteboard package containing 10 pieces of chewing gum, as it has only received a sample package without the gum being contained therein.

"If the sample package attached to your letter is identical with the packages which the gum company furnishes the cigar manufacturers, it would be regarded by this office as a penny package, six of which retail for 5 cents, 110 boxes retailing for $1, to which must be affixed, by the manufacturer, a 4-cent stamp before the gum is removed from the place of manufacture.

"The retail value of the one thousand boxes, as ascertained by this computation, would be $8, requiring tax of 32 cents on each one thousand boxes delivered by the gum company since June 30, 1898.

"You will carry the investigation further and report the quantity in boxes, containing 10 tablets each, of chewing gum sold since July 1, 1898, the date the act of June 13, 1898, took effect, which imposed a tax on chewing gum, and you will serve a notice on the gum company to appear before you and show cause, if any they have, why an assessment should not be made in this case against the company for the tax on all chewing gum removed from the factory unstamped since July 1, 1898, and you will ascertain from their books, and the books of the cigar manufacturers, if necessary, the quantity of chewing gum so sold, and estimate the amount of tax due and return the same on Form 23 for assessment by the Commissioner.

"The manufacturers may file such statements, affidavits, explanations and evidence as they may deem necessary. All papers will be forwarded by you to this office, with your Form 23, with whatever recommendation you desire to make in the case, and the evidence which you will obtain, as necessary in determining the liability and the amount of assessment."

Summary action has also been taken in the case of a Brooklyn firm which has been putting out quantities of alleged substances for confectionery, said containers being made of paraffin and other substances composing a chewing gum similar in all respects to the article as sold separately by other manufacturers. In a letter to the Collector for the Brookyn district the Commissioner says:

"This office has received your letter of the 12th in reply to office letter dated the 9th instant relating to the 'Peiper Heidseck' chewing gum manufactured by a Brooklyn firm.

"Your explanation that these little bottles, made from paraffin, are simply containers for candy, and are not sold as chewing gum is not satisfactory. Schedule 'B' of the act of June 13, 1898, imposes an internal revenue tax on chewing gum or substitutes thereof, and, while these manufacturers are making a chewing gum from paraffin glucose and sugar, which they properly pack and stamp before its removal from the place of manufacture, this is not an explanation why they should not properly pack and stamp the 'Peiper Heidseck' brand of the same articles, which is used as a substitute for chewing gum.

"The office appreciates the position in which you are placed by having heretofore advised the manufacturer that, in your opinion, their article was not subject to tax as a chewing gum, nevertheless the office insists that these small bottles made from paraffin, which is used, when sold, as a chewing gum, notwithstanding they may have a small quantity of candy packed in the same, are subject to internal revenue tax of 4 cents on each retail dollar's worth sent out from the factory; and to each package containing chewing gum of more than one dollar of retail value, an additional 4-cent stamp must be affixed to each such package.

"You will, therefore, proceed as directed in the letter of the 9th instant, to ascertain how much chewing gum has been sent out from these several places since July 1, 1898, not stamped.

"This question has been raised by collectors for other districts for the reason that this chewing gum 'Peiper Heidseck' has come in competition with other chewing gum upon which tax nas been paid, and dealers who have unstamped packages in their possession are being required to properly stamp the same before being sold at retail.

"If the manufacturers desire to pay the tax which they have omitted to pay on this article, the goods found on the market will not be disturbed; otherwise, it will be subject to forfeiture and a subsequent payment by persons who now handle the gum would not release the manufacturers from the liability which they incurred by vending from the place of manufacture without stamping it in the manner required by regulation."

The failure of numerous manufacturers to make the monthly returns required by law, including a certificate to the effect that no unstamped goods have been sent out, has resulted in the levying of assessments in several collection districts. Instructions to the collectors in these districts have been forwarded practically as follows:

"A copy of the regulations relating to chewing gum and substitutes therefor is inclosed herewith. Manufacturers of this article on and after July 1 last were required at the end of that month, and every month thereafter, to make, sign and file with you, or with the collector of the internal revenue district where the factory is located, a declaration, in writing, as provided by section 23 of the act of June 13, 1898. It is assumed that this manufacturer has failed to do so, and has incurred the liability imposed by that section, and civil liabilities for assessment of tax on all chewing gum which he has removed from the place of manufacture since June 30, 1898, not properly packed and stamped.

"You will please ascertain the amount of tax evaded, if any, and report the result of your examination to this office at once, proceeding under sections 3173 and 3176, Revised Statutes."

A number of manufacturers have raised the question as to double taxability of certain kinds of chewing gum advertised after the manner of medicinal preparations, the impression appearing to have been received in many quarters that chewing gum is taxable per se in the first instance, and again if advertised as possessing medicinal qualities. On this point the Commissioner in a letter to a Kentucky revenue agent says:

"This office has received your letter of the 20th instant, in which you present the question whether chewing gum, under certain conditions, should be twice taxed.

"You state that you fling on the market a number of different preparations of chewing gum which have printed on the wrappers certain matters which indicate that the chewing gum is a medicinal preparation; for instance, that one manufacturer will state that his gum is a 'cure-all for indigestion and dyspepsia,' and that it is a 'delicious remedy for all farms of indigestion,' or that the gum 'sweetens the teeth,' or that it is a 'curative for catarrh or for lung diseases.'

"You are advised that the office does not regard chewing gum as a medicinal preparation, and that separate regulations have been prescribed for collection of tax upon chewing gum and upon substitutes therefor. The tax having been paid upon the article as a chewing gum, as evidenced by stamps affixed to the packages, will not again be subejct to an additional tax which is imposed upon medicinal preparations under the act of June 13, 1898."

The collector of the Rochester, N. Y., district has reported that certain manufacturers desiring to send out free samples of their goods have adopted brands designed to represent a claim for medicinal qualities in their product and under this guise have distributed free samples as authorized in the case of medicines by the standing regulations of the Internal Revenue Bureau In dealing with these cases the Commissioner has advised the collector as follows:

"This office has received a complaint that the Medical Chewing Gum Company at Buffalo is sending out free unstamped samples of 'The Doctor' chewing gum from their factory.

"You will please advise them that there is no provision made by regulation for the distribution of free samples of chewing gum from the factory or place of manufacture, and that all chewing gum sent out must be properly packed and stamped."

(Special Correspondence to the Reporter.)

Chicago Oil Market.

Chicago, June 15, 1899.

The week was marked by an advance of 3c. in Northwestern flaxseed, 2c. in No. 1, 1c. in July and 2c. each September and October. There were few transactions, however, owing to light offerings. There was nothing offered at the bid prices, and little desire shown to either sell or buy. Cash seed was very scarce and held above current prices. A little better speculative demand was caused by the small movement. Considerable strength developed by Saturday, though offerings were still light, which tended to restrict business. Brokers here this week have taken all the cash seed they could get hold of, presumably for crushers, which maintained the price of Northwestern at the close relatively higher than other grades. The following table gives the range of prices.

	June 8.	June 9.	June 10.
No. 1 N. W.	104	105	105½
No. 1	102	103	103½
July	102	103½	104
September	93½	94½	95½
October	93¼	94	95¼
	June 12.	June 13.	June 14.
No. 1 N. W.	105½	106	106
No. 1	103½	103½	103
July	104	104	103
September	96	95½	95
October	95	95	94½

Chicago stocks have reached the 700,000 bushel mark, but are hardly likely to go higher. This city now has practically all the flax available for Western consumption. Minneapolis is cleaned out, the comparatively small lot of seed at Duluth is under contract, and the invisible stocks have been drawn on till they are depleted, with the exception of what are believed to be small amounts in private houses. A Northwestern dealer was solicited to buy approximately 100,000 bushels, but couldn't obtain a bushel. It was wanted by a crushing interest. Everything in sight is in Chicago, and practically everything in the country is included in the following table of Chicago in-store stocks for June 10:

	No. 1 N. W.	No. 1.	Rej.	No gde.	Total.
June 10....	21,061	631,769	40,998	8,866	702,694
June 3.....	24,023	603,793	46,008	8,866	682,690
Increase..	*2,962	27,976	*5,010	....	†20,004
June 11,'98.	251,523	815,902	37	2,629	1,070,091

*Decrease. †Net decrease.

Last year No. 1 decreased 87,111 bushels and Northwest increased 93,116, a net increase of 6,005 bushels. Counting the mills now in operation here there is a daily consumption of about 12,000 bushels, which must in the main be taken from seed in store. It now looks as if there would be little seed carried over into the new crop. The time is rapidly drawing near when it will be determined whether the seed in store will be required for actual use in order to supply the trade demand for oil. If it is wanted the buyers will have to reckon with the parties who have the cash seed in Chicago. That is the whole story. The weak feature is that the amounts in store have continued to increase, and although the seed is said to be of better quality than for years, it is not being taken out of store for consumption. The question is, what will the situation compel Western crushers to do, or will it compel them to do anything? Then there arise the possible accidents to the growing crop. Any damage to the Southwestern crop, or any weather that will delay the harvesting, makes the position of the holders of the cash flax that much stronger. It is understood the latter are holding for materially higher prices. Unless they get what they consider a fair return, they will carry it over. The receipts of the week were 71 cars, of which 26 were mill transfers. Of the 45 arriving from country and primary points, it is claimed they consisted largely of flax held for seed purposes, both Northwest and Southwest, and not used. The receipts follow:

	N.W.	No.1.	Rej.	No gde.	Non-inspd.	T't'l, 1899.	T't'l, 1898.
June 8....	2	..	..	..	..	2	8
June 9....	1	3	1	..	10	15	5
June 10...	3	1	..	..	7	11	9
June 11...	..	..	..	..	..	..	6
June 12...	13	4	..	..	8	25	..
June 13...	5	3	..	1	1	10	18
June 14...	3	1	3	1	..	8	4
Total ...	27	12	4	2	26	71	50

The shipments were of little consequence. There have been no further withdrawals from store since last week's telegram. The movement:

	No. 1.	Non-inspd.	Total, 1899.	Total, 1898.
June 8.....	....	....	....	1,356
June 9.....	6,156	....	6,156	....
June 10.....	....	....	....	5,181
June 12.....	....	915	915	....
June 13.....	....	1,828	1,828	8,950
June 14.....	....	1,359	1,359	85,055
Total	6,156	4,102	10,258	100,492

As to the Southwestern acreage, one of the most reliable shippers in the Southwest states he has just secured a statistical report from Neosho county, Kan., showing 12,753 acress put in flax, but that he knows positively that not 10,000 acress have been sown in that county. Flax looks promising, but is ten days later than last year. Indications are for a full crop. Wet weather occurred during planting season, which, as in the Northwest, made them late. He is of opinion that seed sown in Northwest after the usual season will not amount to much. Another shipper in Kansas writes as follows: "Up to the present the prospects have been very good for flax, but we are having too much rain. Crop will not be over 50 per cent. of that of last year. Dealers and farmers have been so discouraged with grades and discounts that they have sown less flax than for any time in five years. Taking everything into consideration, I would favor higher rather than lower prices." A third shipper says: "The acreage in this territory is one-third less than last year. Growing crop seems to be in good condition. There is a little too much rain in some localities, and it is too early yet to speculate on yieul. The general impression of largely interested parties in the Northwest, men who talk conservatively, is that the increase will not average more than 10 per cent., and that it is largely of late sown flax; in fact, some of it is yet to be sown. The increase is said to be north of the Northern Pacific road, and, everything considered, will be a very uncertain quantity, of which nothing can be said until it is harvested. These are summaries of views from best sources in both flax growing sections of the country. If the crop prospects are good in the United States, the fact is not reflected in the markets by even ordinary offerings at this time of year. At the same time, the demand is not urgent, but undoubtedly will improve when it is realized that supplies, if any are wanted, must come from Chicago. There has been a continuous demand for October flax, partly for export. It is said some more seed was sold for export at 93½@94½ for September-October shipment. There is a hardening in the price of Calcutta seed in London for June and July shipment via Suez Canal. The price June 1 was precisely the same as June 1, 1898, and 2s. per quarter higher than June 1, 1897, and yet there does not appear to be any trading in linseed in foreign markets for September-October delivery, buyers and sellers being disposed to await developments in regard to the Russian and American crops before trading in the above months. If there is to be a foreign demand for American seed, it is certainly among the possibilities, if the American crop does not much exceed 16,000,000 bushels, in fact, a fair probability, that the foreign demand will take all the surplus we can spare, and the American price be regulated more than usual by the foreign demand. In the opinion of many 16,000,000 would not leave much of a surplus for export.

DULUTH.—Flax prices opened the week ½c. higher all around, and showed further advances to Wednesday, when a reaction of 1c. was brought about in cash seed, new crop seed not sympathizing. There was a good demand at the following range of prices:

	June 8	June 9	June 10	June 12	June 13	June 14
To arrive	101	101	102	102½	103	102
June	101	101	101½	102	103	102
Sept.	93	94	94¾	95¼	95¼	95¼
Oct.	92½	93	94½	94½	94½	..

The receipts were very light, 20 cars, and Minneapolis had but 9. Over half the in-store stocks disappeared last week, and 8,000 of the remainder has already gone out. The stock June 10 was officially given as 167,217 bushels, a decrease of 177,337 bushels. Minneapolis had got down to 17,020 bushels on the 10th inst. The sowing in North

Dakota is practically finished, but little can be said of the acreage yet, as there are great stretches of country back of the railroad without telegraph facilities, and one can only know what has been done by going through the country with horse and buggy.

LINSEED OIL.—The linseed oil situation is decidedly strong. It is becoming more and more evident that stocks in the hands of jobbers and country dealers are exhausted, and that the consumptive demand for oil continues active. Each mail brings urgent instructions to rush shipments forward, as the buyers are entirely out of oil. Buyers who haven't been in the market for six months are now asking for car lots. Prices are firmly held at 35c. here and 36c. at Western points, and even at these figures crushers show no anxiety to sell. It is known that an order at 35c. was turned down by one crusher Wednesday. This may be accounted for in two ways. First, by the scarcity of oil; second, the probability of better prices in the immediate future. As to scarcity, it may be well to particularize. At the time the American Linseed Company was formed the National mills were pretty well dried up, and operated but little for some time after. The independent mills which joined the company were largely sold ahead. The most they could reasonably be expected to do would be to keep up to the demand for spring use. For this reason it is believed their stocks are light. Outside the American Company all mills in the West, with one possible exception, have very light stocks. Even if there is the one exception, it may safely be said that that mill is willing to await the more peremptory demands for its oil at higher prices that in all probability will come before new crop oil is available. The active demand for oil, taken in connection with its scarcity, should, it is claimed, advance values. Crushers look for 40c. oil by August 1, and say they regard that price as a conservative guess. Chicago crushers have been invited to figure for July and August deliveries East, but seem willing to leave the East to itself, as they refuse to make quotations. Orders from their own territory are coming in faster than they expected. There has been the largest consumption of linseed oil ever known, and the indications all favor an advance in price. Among mill changes it is noticed that the Swanwell mill started up Monday last. Another mill reports more cooperage in operation than for several years.

OIL CAKE.—This product remains quiet but steady. There has not been much inquiry the past week for export, but as crushers claim to be well sold up, they are not anxious sellers and are holding firm at $21. Exporters' views range from $20 to $20.50. Production has been light for some weeks. There is not much doing for immediate shipment and no buyers, except perhaps for August and September shipment.

OLEO OIL.—There was a steady market in oleo, with trade rather slow at 7⅜c. Chicago and 45 florins Rotterdam. Shipments are abnormally heavy and point to lower prices. Last week's exports were 6,700, against 6,000 the previous week, and altogether there were 11,500 tcs. afloat. Sales were somewhat smaller at 4,200, as compared with 5,000 tcs the week before. Stocks were 1,000 tcs for both weeks, but will be materially increased by the stuff afloat.

LARD.—The market is sluggish and dull and without feature, closing at 5c. From an opening of 5.02½c. it declined to 4.92½c. due to small amount of business, both cash and speculative, and also to the extra heavy run of hogs. English houses bought on the break. Later the loss was recovered, partly due to strength in wheat market. Shipments from Chicago were 25,000 tcs. Exports 19,500 against 30,500 last year. Estimated stocks Saturday night are 174,000 tcs, an increase of 10,000 since the first of the month.

TALLOW.—The tallow market was easier closing, with edible and prime nominally 4¾c.; country, 4⅛@4½c., according to grade and package; renderers freely offered at 4⅛c, with liberal orders in the market at 4c. The weakness was partly due to increased offerings from outside makers, who had been well cleaned up of late, and lack of anxiety for stock on the part of buyers. Large receipts of cattle also had a weakening tendency.

STEARINES.—Oleo Stearine is held at 5⅝c. by all makers, with some inquiry from the East at 5½c. Stocks here are light and in the West generally are only fair. A few small orders on market at 5½c., but with good export inquiry at this price, local buyers will probably have to pay asking price in order to fill requirements. Tallow stearine, 4⅝c.; mutton stearine offered at 5⅝c.; grease stearine nominally 4⅝c.

GREASES.—Dull market, but prices unchanged. A, white, 3⅝@3¾c.; B, 3½c. bid; brown, 3⅛@3¼c.; yellow, 3.30 @3⅜c.; house freely offered at 3½c., but nominally at 3⅛c., at which sales were made.

CLOSING TELEGRAM.

September and October flaxseed advanced 3c. Thursday on reports of disaster to Russian crop, local conditions being of minor importance; reacted ½c. to-day, closing with sales of September at 97½c. and of October at 97c. Northwestern is 1c. higher at 107, with 107½ bid on Rock Island road. July 2c. higher, with sales at 105; only 16,000 bushels traded in. Movement light. Some 10,000 bushels taken from instore stocks for consumption. Market for oil a cent firmer at 36c. here. Actual demand is taking oil rapidly, and feeling of weakness has changed to one of strength.

RECENT PROGRESS IN INDUSTRIAL CHEMISTRY—XV.

Destructive Distillation.

There is an article by Mr. Klar in the Chemische Industrie on the "Modern Distillation of Wood for the Production of Acetic Aicd, Wood Spirit and Acetone in a Pure Form." The question is taken up quite fully. Though in America as well as in other countries where wood is comparatively plentiful, it is still the custom to prepare wood charcoal by charring wood in heaps, there are now a number of works where it is carbonized in retorts and the products of the distillation made use of. This is a matter of importance, for in the United States the proportion of forest land is not greater than in Germany, being about 25 per cent. The total area of forest in this country is, of course, more than in Germany.

Not only is it necessary for the best yield of acetic acid that the temperature of the retort should be gradually raised to 350 deg. C., but it is essential to withdraw the acid vapors rapidly, and therefore the pressure in the retort is kept low by means of an exhaust. The form of apparatus for carbonization differs according to the material to be carbonized, being adapted for the wood of foliage trees, for the wood of coniferous trees and for sawdust and other forms of wood waste. The retorts used are horizontal or vertical.

In the carbonization of coniferous trees the production of oil of turpentine is one of the first stages. A gentle heat is applied, and steam at the same time introduced, the steam becoming ultimately superheated, as the temperature is raised. The gaseous products are passed through milk of lime before condensation. When all of the oil has passed over, the steam is shut off and complete carbonization brought about by external heat. The oil of turpentine is first redistilled with ordinary or superheated steam, then rectified by distillation in a partial vacuum, in which way it is freed from creosote, and finally fractionated in four column stills.

Bergmann has obtained several patents for the carbonization of wood waste, such as sawdust, spent dyewood and tanners' bark. The material is compressed into briquettes and the charcoal produced is solid enough to be transported without falling to pieces.

Crude acetic acid from wood contains tarry substances and homologues of acetic acid, as well as 10 per cent. of acetic acid, 1 per cent. of methyl alcohol and 0.1 per cent. of acetone. The wood spirit is first distilled from the tar, and when the acetic and other acids have been removed by lime, producing the gray acetate of lime, the crude spirit is purified by filtering through wood charcoal to remove ketones, tarry matters and hydro-carbons, and is then rectified in column stills.

The water used in cooling is introduced into the refrigerator at the bottom, and when it has reached the proper temperature passes into the water tank containing the condenser, from which it either runs away or is pumped to the upper part of the column. Care is taken that the temperature as it leaves the apparatus is that which experience proves to be the best. The first distillate is always more or less colored. The middle fraction contains the spirit of highest concentration. Afterward higher boiling point products come over; they may be detected by their giving a turbidity on the addition of water. Still later the distillate consists of oil and water, which separate into two layers.

The wood tar is not very generally treated in this country for the production of creosote and guaiacol, the raw product being worked up in Germany. For the preservation of timber, one of of its main uses, it needs merely to be dehydrated. For the further recovery of the products the tar is treated with lime and fractionated in cast-iron stills heated by a direct fire. The first product is wood spirit, then acetic acid. The distillate below 150 deg. C. is known as light oil, the heavy oils distill between the temperatures 150 deg. C. and 250 deg. C., after which the quantity of paraffin and gaseous products increase and ultimately anthracine comes over. The residue, which is a considerable proportion of the whole, is wood tar pitch.

In order to obtain the creosote the light and heavy oils are mixed, neutralized with soda to remove the fatty acids, and fractionated, the portion coming over between 150 deg. C. and 250 deg. C. being collected separately. This portion is then treated with a concentrated solution of potash or soda, allowed to settle, run off, boiled to expel hydrocarbons, and acidified with sulphuric acid. This process is repeated till the product is entirely soluble in alkali, when the final traces of phenol are removed by washing the oil with weak soda or ammonia. It is then redistilled, oxidized with chromic acid mixture, fractionated in glass, the portion boiling between 205 deg. C. and 220 deg. C. being collected separately. This is the creosote of the German pharmacopaeia. Guaiacol, which forms about 60 per cent. of the creosote from beech tar, is prepared by a further treatment of the creosote.

There are two methods for the preparation of pure acetic acid. The first is by changing the crude acid or the crude calcium salt into sodium acetate, which is then subjected to fractional crystallization, filtration through charcoal and decomposition of the higher fatty acids by fusion of the salt. In the second method the calcium acetate is treated with strong mineral acid, and the crude acetic acid is subjected to fractional distillation in column stills. The middle fractions are collected separately, and by repeated rectification a pure acetic acid is obtained.

The crude wood spirit, from which rectified spirit, methylated spirit and pure methyl alcohol are obtained is a yellowish to brownish liquid, has an emphyreumatic odor and gives a turbidity with water and sometimes contains as much as twelve per cent. of acetone.

The crude spirit is converted into "white rectified spirit" by subjecting it to distillation in a column still in the presence of milk of lime. The first fraction contains much acetone, the middle fraction but little. The last fraction gives a turbidity with water owing to the presence of the higher ketones.

For the preparation of wood spirit for denaturing purposes, the first and last "running," containing much acetone, are redistilled, mainly with a view to obtaining a colorless product. This is then tested for specific gravity, percentage of acetone and bromine absorption. Usually the amount of acetone is below that required for the excise standard, and pure acetone needs to be added.

In some cases in which wood spirit was found to contain ethyl alcohol, it was noticed that there was a fungus growth on the wood, and there was probably alcoholic fermentation.

A process for refining crude petroleum and analogous oils by fuming sulphuric acid has been patented by the Badische Anilin und Soda Fabrik, through J. Y. Johnson, London. It had been found that the use of fuming sulphuric acid for the purification of oils gave rise to difficulty, because the fuming acid very rapidly forms pitch-like bodies, inclosing some of the acid which is thereby removed from action. The process avoids this difficulty by introducing the acid at the point of contact of streams of the crude oil. These streams flow at different rates, a friction being in that manner caused between them, and the oil is thoroughly ground, together with the acid. Another difficulty experienced is that some oils, especially the heavier ones, when treated with sulphuric anhydride, produce substances which do not separate out as the pitch-like compound does. On washing such compounds with soda and water, the impurities are formed anew and contaminate the oil. These combinations may, however, be removed by treatment of the oil with a small percentage of ordinary contentrated sulphuric acid. The refined oil is lighter in color than when either sulphuric acid alone or sulphuric anhydride alone is employed, and it becomes still lighter in color if acted on by the light. Only about half of the acid hitherto employed is necessary.

W. A. Smith, Cleveland, Ohio, patents an improved process for refining oils, which is specially applicable to oils containing sulphur compounds, such as are found in the Lima district in Ohio, and in Canada and other places. The process consists in heating the oil or its distillate with spirits of turpentine in the proportion of one gallon of the latter to 500 gallons of the former. Rosin may be advantageously employed instead of turpentine, when neutral or heavier distillates are used, 3 lbs. of rosin being employed for 1,100 gallons of the distillate. The mixture is heated till the temperature reaches the point just beyond which distillation begins. The temperature is then lowered, the liquid is pumped into agitators and treated with sulphuric acid, the agitation being produced by flowing air through the liquid. The acid is then drawn off and the operation repeated till the acid ceases to act on the distillate. The latter is then washed with water, which removes the excess of the turpentine or rosin introduced into the mixture. After drawing off the water, a small quantity of caustic soda is introduced for the purpose of neutralizing any slight amount of acid remaining behind after the treatment. The sulphur compounds, if not eliminated, cause, during combustion, disagreeable odors and deposit deleterious matters on the wick, thereby reducing the candle power of the lamp and the value of the oil.

J. R. Michler in the "Engineering and Mining Journal, says that the use of chlorochromic acid instead of 66 per cent. sulphuric acid, which has been recommended for refining the distillates of the heavier oils has given unsatisfactory results. The oils do not properly clarify after being neutralized. Michler therefore recommends the use of sodium silicate, either alone or with the addition of sodium hydrate or carbonate. The advantages of the process are claimed to be that a smaller percentage of sulphuric acid may be used for the heavier oils, because the dark oils produced in this way are decolorized by the separating silicic acid. The emulsions deposit quickly, owing to being carried down by the silicic acid.

S. Pitt, of Sutton, Surrey, has a patent for the extraction of benozls from heavy oils, and for fractionating hydrocarbons which accompany benzols. The process consists in causing the heavy oils to fall in layers so as to meet a current of steam, and in separating the light oils and higher hydrocarbons by a slow and fractioned condensation at definite temperatures, from the mixture of water and volatile hydrocarbons carried over by the steam during the distillation. Naphthalene, for instance, distils over with steam of 98 degrees C., and condensing, forms a mixture of one hundred parts of water and eighteen of naphthalene. A mixture containing one hundred parts of benzine and eight parts of water distils at 68 degrees C., while with toinene, a mixture having the same proportions, distils at 80 degrees C.

C. Henry, of Paris, patents an improvement in the process for removing the smell from petroleum. The ordinary refined petroleum is treated with potassium plumbite. Successive treatment with potash and lead subacetate has been tried, but the process is more complicated and not so effective. The process for decolorizing the oil is of a twofold character. In certain petroleums a yellow color is produced by potassium plumbite, but it is removed by a current of ozone. Another coloring matter, yellow by transmitted and blue by reflected light, is due to an oxidized product, and it is removed by reducing substances such as zinc powder.

R. Zaloziecki, in the "Chemische Revue der Fett und Harz Industrie," describes a process for preventing the loss of sulphuric acid in evaporating down the sludge acid from the refining process. The loss is caused largely by the organic matters in the acid, and in order to avoid this reduction, dilusion, air and light are the three factors employed. The first causes precipitation, the second and probably the third promote sulphonation and oxidation. In purifying the separated acid, the addition of one-half to one per cent. of bleaching powder or potassium chlorate is highly efficacious. By allowing the acid to react at high temperatures on clay the author obtains light colored solutions, free from organic matter and suitable for making aluminium sulphate and alum, and if the following

precautions are taken 90 per cent. of the acid may be recovered. Pure, air dried, finely powdered fire clay or other non-marly clays, free from iron, must be used; the acid should be diluted with half its volume of water; the clay and acid should be mixed in equal proportions and heated for six hours at a temperature between 180 degrees C. and 210 degrees C.

Impure lyes may be worked up for alum, and pure alumina may be obtained by decomposing the above solution with clarified waste lye from petroleum works and treating the sodium aluminate with acids. The improvement in the process applies to ozokerite and paraffin refining, not to petroleum acids. Lacquers, varnishes and paints are obtained from the separated tarry matters by boiling an equal volume of water and neutralizng with basic oxides or carbonates or with organic bases. The mass is freed from water and converted into lacquer by dissolving in a cold mixture of very strong alcohol and benzine, oil of turpentine or tar oil. The products are classified with the "mixed resin metallic soap lacquers," and are quick drying, on account of the siccative properties of the petroleum and sulphonic acid salts. They are not acted on by light or air, but are affected by water. They are suitable for use on metal, leather and wood.

W. Heinrici, in the Zeitschrift Zur Angewandte Chemie, describes experiments on the utilization of the waste acid from the purification of mineral oils. He speaks of the various methods suggested, none of which has found general adption. He recommends working up the acid into sulphur. With this end in view he heats the vitriol tar in a still with one-third its weight of coke. Sulphurous and carbonic acids are produced as well as water. The water is removed as far as possible and the emphyremuatic substances are passed through a scrubber containing heavy paraffin oil. The gas then passes through a heated stoneware or porcelain pipe filled with pieces of coke, in order to reduce the sulphurous anhydride to sulphur, the temperature being regulated to the point at which reduction takes place without the possibility of forming carbon bisulphide. The carbon dioxide escaping from the chamber in which the sulphur is condensed passes into an alkaline solution of phenols, thereby producing sodium carbonate. The sulphur thus obtained is very pure, arsenic even being eliminated if the temperature is kept within the proper limits. The phenols are removed from the solution of sodium carbonate, and the latter, after concentration, if necessary, is allowed to crystallize. The mother liquor contains sulphides, and the sodium salts of some of the fatty acids.

The crude asphaltum called "Manjak" which is found in the Barbado's, is described by W. Merrivale in the Engineering and Mining Journal and by J. H. Pye in the Journal of Gas Lighting. There are two varieties of Manjak, the Merrivale, which is chiefly used for varnishes and paints, and the emptage, a cheaper kind, which is used for car roofings and insulating purposes. Manjak is black, has a high lustre and a bright conchoidal fracture, in appearance closely resembling newly broken pitch. One speciment when analyzed gave volatile organic matter 70.84 per cent; non-volatile organic matter, 26.97 per cent; mineral matter, 0.18 per cent. It yields gas of high illuminating power and has been suggested as an enricher for coal gas.

W. Scott Wilkinson, of Baltimore, Md., has taken out a patent for refining asphalt such as that obtained from the pitch lake in Trinidad. The purification is effected by sunbjecting the crude asphalt in an open tank to the action of steam heat disseminated throughout it. The steam passes through pipes in the tank, heating the asphalt uniformly. During the operation the asphalt is stirred by means of jets of compressed air, in order to bring every portion of the mass into contact with the hot surface, thus breaking down the emulsion, settling free and rapidly evaporating the water, and at the same time preventing the inorganic matter from settling and carrying down valuable asphalt.

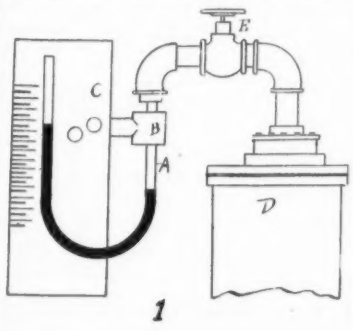
I. W. Hayward, Cleveland, O., patents an artificial asphalt from petroleum residue, which he mixes with ground limestone, the amount of the latter being from 20 to 60 per cent., depending upon the character of the petroleum residue and the nature of the product to be made. The retort containing the mixture is heated to the requisite temperature, and while the mixture is in a heated condition air, preferably under pressure, is admitted and efficiently diffused through the material, in order to rapidly oxidize the same and bring it to the required consistency. Ozone or ozonized air may be used to facilitate the oxidation.

(To be Continued.)

LUBRICATING OILS.—XLV.

LUBRICATION AND THERMO-DYNAMICS OF MOTORS.

During the past two years there have been organized a large number of motor power companies using air, electricity, steam, gas and gasoline as the motive power for vehicle propulsion. Fully a dozen of these companies have been organized in the Eastern States, with a capital of $500,000 to $25,000,000 each, for the purpose of operating autotrucks, automobiles and similar forms of horseless vehicles on an extensive scale. The different companies usually operate from 25 to 100 ehicles each from a central station, where the repair shops are situated and where the machines are cleaned, oiled, overhauled and put into condition for street service. It is with the superintendent of the station that the oil agent bargains



TESTS OF FORCE OF PRODUCTS OF THE COMBUSTION OF HYDRO-CARBONS IN AIR.

concerning the furnishing of the lubricating oils for the machinery of what is practically a new device. The mechanical motions of the motors employed for moving carriages and wagons are not essentially different from those of ordinary power and transmission apparatus, but the forces used, except in the case of the steam carriage, are unlike, and require special lubricating service. The principal motor fluids used expansively for vehicle propulsion are carbon dioxide, compressed air, steam and the products of the combustion of hydro-carbons in air. It will pay the oil agent to study the thermodynamics of vehicle motors from the point of lubrication, and thus avoid the numerous troubles which follow the use of oils of improper composition for the peculiar service. Vehicle motor engineering is a new art, and it has not been the writer's experience to meet with superintendents of stations or foremen of motor repair and service rooms who were capable of selecting the oils of proper grade to meet the requirements of the machines operated by them. In one case, on a second trip to the office of a newly established vehicle motor station, the superintendent informed the writer that he had changed the oils because of the carbonization of the lubricant in the stuffing boxes of the cylinder heads. The oil had been furnished without knowledge as to what service it would be put. It would have given satisfaction as a lubricant for the piston of a vertical cylinder, using steam to vaporize and mix the oil with the contents of the cylinder, or in any air cylinder.

In this case, however, the oil was used on vehicle motors, in which the cylinder was horizontal, and in which gas was the motive power. The oil, although of good grade, collected in the stuffing boxes, where it was burned by the hot gases, and was the means of putting a number of the vehicles out of service, owing to the caked stuff binding on the piston and stopping the motor.

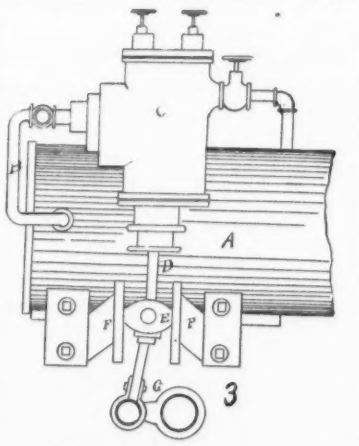
Annoyances of this kind can be averted if the oil agent first ascertains the type of motors which the vehicle company is using, and also the motive power.

TESTING DEVICE.

The little home-made testing gauge shown in Fig. 1 will be useful for ascertaining the pressure developed in motor cylinders by fluids used expansively, or by products of the combustion of hydro-carbons. The device consists of the circular shaped piece of glass tube a, which is secured to a wood block or base c by means of the bracket b. This tube is partly filled with a mixture of colored water and alcohol, represented by the dark portions in the tube. An index for reading purposes is then provided and gauged off with figures, similar to the principle of the regular anemometer. The top of the glass tube next the bracket is connected into a rubber tube, or a pipe provided with a valve at e and this pipe is joined to the cylinder d as shown. The valve being opened, the force of the power within the cylinder moves the contents of the tube in proportion to the energy employed. The scale is laid out so as to indicate total differences in level of the fluid in one loop of the tube with the fluid in the other loop, for which purpose it is necessary to have the fluid stand at precisely zero in both loops, or at a level, when the tube is open to the atmosphere, or when subject to no pressure.

EXPANSION FROM PRESSURE.

In Fig. 2 is a sectional drawing of a cylinder and connections for illustrating expansion from given pressures as utilized in vehicle motors in which gases are used as the power. As is known to air and gas motor engineers, the capac-



CONSTRUCTION OF STEAM AND ELECTRIC MOTORS.

ity of gases for work in these cylinders is calculated in proportion to the amount of heat which a given volume absorbs and again gives out as work by the action of the pressure in moving the piston b, for example, in the drawing. The atoms and molecules of the gases are in constant motion and vibrate corresponding with the heat of the gas. Suppose that the air contained in the space c in the cylinder is heated a little. The expanding air will move the piston a short distance, carrying the connecting rod and crank with it. If the temperature is raised, the piston will move still further, and so on to the end of the cylinder. The expanded air has therefore moved the piston, overcome the frictional bearings of the parts, the weights, and also operated the crank shaft. Reversing this order, and instead of expanding the air, we oppose the expansion by exerting pressure, fractional brakes must be used on the shaft to prevent its turning and sufficient force used to maintain the volume of air constant. Gas in expanding from a higher to a lower temperature without doing work (in this case without moving the piston) does not change its temperature. If gas is admitted into the cylinder back of the piston at c, and the side d is a vacuum, the piston head might be removed, and the gas in c would quickly rush into the vacuum, each molecule serving to accelerate the velocity of all other molecules ahead of it, and losing in heat the equivalent of the work done. The efficiency of the engine should, therefore, be measured by the ratio of heat converted into work to the entire quantity of heat in the motor fluid entering the cylinder. When equal quantities of mechanical effect are produced from purely thermal sources, or lost in purely thermal effects, equal quantities of heat are put out of service, or are developed. Heat is converted into work, or abstracted from a gas to move the piston of the engine, the ports and valves of which are regulated by the eccentric cam keyed to the shaft at d. Compressed air is also expanded to do the work in some motors, in which case the oil agent must take into account the absorption of heat by the walls of the container and surrounding air, all of which affect the lubrication. With respect to liquids which develop a high vapor tension at normal temperatures, the fact must be taken into account that some of these liquids affect the lubricating oils. These liquids now are carbonic acid, liquid ammonia and liquid air, with several other kinds in process of experiment. Carbon dioxide gas, volume for volume, is much heavier than steam at the same temperature and pressure, yet I have seen oil men sell precisely the same grades of lubricating cylinder oil to the motor men that they sell to steam engineers and wonder why the motor people do no place a second order. It is not necessary to enter the inexhaustible field of chemical and technological testing of oils to procure the right sort for the above service. The cylinder and machine oils, which combine the best qualities of fatty oils with the fine diffusing qualities of mineral oils, do not as a rule suffer from decomposition from the hot gases, and they keep nearly uniform in hot places, cling well to the metal surfaces and do not gum.

STEAM MOTOR VEHICLES AND LUBRICATION.

In figure 3 is a view of the general plan of the modern steam driven road wagon or carriage. The boiler a is five horse-power fixed beneath the body of the wagon, and to its side is attached the cylinder c. The firing is done with picked anthracite or Cumberland coal for fuel. The cylinder is plain slide valve pattern, 10-inch stroke, and the piston d is attached direct to the crank shaft g. The crosshead e and the bearings f, f, are very similar in plan to the common type of steam engine. The great trouble with these motors, from the point of lubrication, is that the oiling is done spasmodically. There are already a number of express and heavy service vehicles fitted with these steam power motors in different cities in this country, and in almost every instance the dust and dirt from the road is permitted to clog the bearings of the machine, and this, together with irregular oiling, renders the machine useless in a few weeks. If attention is called to the clogged valves and gummed bearing surfaces, the lubricant is at once condemned. The lack of attention to the machinery can be overcome by the oil agent explaining that the parts should be regularly wiped and cleaned, oil holes opened if choked with dust, and the oil can used when required. The cylinder lubrication is more difficult. I have, however, put on sight feeds in a number of cases, since which the previously condemned oil has proved itself satisfactory. A good sight feed engine or pump cylinder lubricator can be readily attached to the cylinder of the steam motor in vehicle service, and with good results, as it will do away with the spasmodical method of oiling so common with many individuals.

THE ELECTRIC MOTOR.

The oil agent will notice that a goodly proportion of the vehicle motors are operated by electricity. Figure 4 is the usual form of electric vehicle motor, with part of cover removed, showing commutator at a and the brushes at b, b. Special reference is made to these brushes, for often they become worn or misplaced, causing sparking and general bad work, which is frequently blamed to the lubricating oils. Electric motors are run at high speed, and the speed is reduced by intermediate or reducing shafts. The first shaft being of high speed, should be carefully examined as to its trueness, and as to how it fits the box bearings. Any deflection in alignment or untrueness in the journals, clogged parts or tight fits, will surely cause heating and trouble with the lubrication.

(To be continued.)

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It will do this in a quick and clean manner and without heating your kitchen five degrees during the day.

Standard Oil Co. of New Jersey.

The Standard Oil Company of New Jersey has increased its capital stock from $10,000,000 to $110,000,000. The certificate, filed with the Secretary of State at Trenton last Friday, which authorizes this increase of capitalization is signed by Henry M. Flagler as president, and by L. D. Clarke, as secretary, and contains the resolution adopted at a stockholders' meeting held in Bayonne last Wednesday.

The certificate shows that the increase is authorized by the holders of 67,631 shares of stock, which is more than the two-thirds required by the law. The capital stock of $110,000,000 is divided into $10,000,000 of preferred stock, to receive dividends not to exceed 1½ per cent. each quarter. The certificate provides that the shares now existing shall be preferred stock and that common stock may be issued in exchange for preferred.

The board of directors is empowered to use any surplus earnings for the purchase of property or for the purchase of the company's own stock, and the property or stock so purchased cannot be made available for paying dividends unless the directors so order. The board of directors may appoint an executive committee of three, with full powers of the board, to manage the company's business.

The articles read that it has power "to do all kinds of mining, manufacturing and trading; to transport goods and merchandise by land and water in any manner; to buy, sell, lease and improve lands, build houses, structures, vessels, cars, wharves, docks and piers; to lay and operate pipe lines; to erect and operate telegraph and telephone lines and lines for conducting electricity; to enter into and carry out contracts of every kind pertaining to its business; to acquire, use, sell and grant licenses under patent rights; to purchase or otherwise acquire, hold, sell, assign and transfer shares of capital stock and bonds or other evidences of indebtedness of corporations, and to exercise all the privileges of ownership, including voting upon the stocks so held; to carry on its business and have offices and agencies therefor in all parts of the world, and to hold, purchase, mortgage and convey real estate and personal property outside of the State of New Jersey."

(Special Correspondence to the Reporter.)

The Free Alcohol Test Case.

Washington, June 16, 1899.

Very substantial progress with the second test case in the free alcohol claims has been made within the past week. At a conference of counsel for the numerous claimants the case of the American Aristotype Company has been selected for argument, the claim involving about $62,000, being tax paid during the period when section 61 was on the statute books on alcohol used in the preparation of collodion. This case has been chosen after a very minute examination of the records to determine whether all the requirements of the law were observed by the manufacturers, including the preservation of stamps and other evidence of the purchase and consumption of the spirits for the purpose claimed.

An important consideration which has had much weight in the selection of this case is the fact that the petition is already on file in the Court of Claims, as a result of which the Attorney-General has practically agreed to an arrangement that will materially expedite the consideration of the case. Mr. Charles C. Binney, special attorney representing the Government in this case, and Mr. Wm. B. King, counsel for the claimants, have had several conferences during the week, and Mr. Binney, on behalf of the Attorney-General, has outlined the method of the Government's defense. Upon receiving formal notice that the attorneys for the claimants propose to try the Aristotype case, the Government will file a demurrer admitting the facts set forth in the petition, but calling the attention of the court to the lack of statutory grounds for the bringing of the suit in view of the adverse decision of the Supreme Court in the Dunlap case. It will be contended that because of the dismissal of the Dunlap petition the new case presents no cause of action. The petition in the case being already on file, the Attorney-General has agreed to file his demurrer during the recess of the court, which adjourned last Monday. There is no doubt that the Court of Claims will dismiss the petition on the demurrer, and this action is likely to be taken as soon as the court reconvenes, on October 16. Counsel will then be entitled to ninety days within which to appeal the case to the United States Supreme Court, but arrangements are being made to file the appeal promptly, probably by or before November 15. The Attorney-General will then unite with the counsel for claimant in asking to have the case advanced for hearing in the Supreme Court, and, following the usual practice, it will probably be set down for argument soon after the holiday recess. Under the present condition of the court's docket there seems to be no reason to doubt that the case will be argued and a decision rendered early next year. This is very quick work for the Supreme Court, and is rendered possible by the peculiarly favorable conditions surrounding the new test case.

Ex-Postmaster-General Don M. Dickinson, who has been in consultation with counsel for the claimants in the bulk of the alcohol cases, has been formally retained in the Aristotype Company's case, and will take part in the argument before the United States Supreme Court.

The movement looking to the passage of a bill waiving that feature of the Government's defense in the alcohol cases which involves the failure of the Secretary of the Treasury to issue regulations, which was outlined in these dispatches several weeks ago, and which was recently referred to in the daily press, is making considerable progress in several important quarters. The bill will have for its sponsors in both Houses several of the most influential men representing Eastern constituencies, and it is possible that it will be introduced in both House and Senate by members of Senator Platt's Committee on Alcohol in the Arts.

Latest Tariff Decisions.

Divi-Divi Extract.

In the case of W. N. Proctor & Co., Boston, Mass., the merchandise was divi-divi extract, and was assessed for for duty at ⅞c. per pound, under paragraph 22, Act of July, 1897, and was claimed to be exempt from duty under paragraph 546, which gives free admission to "divi-divi." The Board of General Appraisers states that divi-divi is a term applied to the reddish-brown curved pods of the divi-divi tree or shrub, which are used for dyeing and tanning, and that, in the opinion of the Board, these are the articles provided for in the tariff under the name divi-divi, and that the merchandise in question (divi-divi extract) is therefore not entitled to free entry. The protest was accordingly overruled.

Kefir Seed.

Merck & Co. protested against the assessment of duty on kefir seed or kefir fungi, as a medicinal preparation, at 25 per cent., under paragraph 68, Act of July, 1897, and claimed dutiability at 10 per cent. or at 20 per cent. under Section 6, or free entry as a crude drug under paragraph 548, or dutiability as a drug advanced in value under paragraph 20, or exemption from duty under paragraph 617, as a crude vegetable substance. The Board finds that the article is used in making koumiss, or a fermented milk known as kefir. The appraiser, however, reported that kefir is used medicinally in chronic constitutional diseases, such as pulmonary consumption, chronic catarrh, etc. But the Board holds that it does not follow that, because kefir is a medicinal preparation, kefir fungi, which is the active principle in the production of kefir, is also a medicinal preparation; and are of opinion that it is material for a medicinal preparation, rather than a medicinal preparation. They also hold that the merchandise in question has undergone a process of manufacture, and is not, therefore, crude; but, not knowing its origin, they cannot adjudge that it is a drug advanced in value. They, therefore, decide that it is a non-enumerated manufactured article, dutiable at 20 per cent. under Section 6.

Sulphate of Ammonia.

The Board has overruled the claims of Ignatius Rosenberg, Heller, Hirsch & Co., et al., that sulphate of ammonia is entitled to free entry, and has affirmed assessment of duty at three-tenths of a cent per pound.

Oleic Acid.

An importation of oleic acid by G. W. Sheldon & Co. was assessed at 25 per cent. under paragraph 1, which assessment is ratified by the Board, who have decided against the claim that the merchandise was entitled to free entry as crude oleine.

Pulverized and Washed Ochre.

J. W. Coulson & Co. protested against assessment of duty on a shipment of ochre from Italy at ⅜c. per pound, for ochre, "powdered, washed or pulverized," under paragraph 49, Act of 1897, and claimed dutiability at ⅛c. per pound as crude ochre under the same paragraph.

The Board of General Appraisers finds that the merchandise is as reported by the appraiser, and affirms the assessment of duty accordingly.

Chinese Wood Oil.

Emil Calman & Co. claimed free entry for Chinese wood oil under paragraph 626, Act of 1897, but their protest was overruled by the Board of General Appraisers, and the assessment of duty at 25 per cent. under paragraph 3 was affirmed.

Washing Powder.

The Central Vermont Railroad Company protested against the assessment of duty on washing powder at 25 per cent., under paragraph 3, as a chemical compound, and claimed dutiability as a soap at 20 per cent., under paragraph 72. The Board of General Appraisers has overruled the protest.

Blood Albumen.

In the protest of F. E. Atteaux & Co., who claimed free entry for blood albumen as albumen, under paragraph 468, the Board has affirmed the Appraiser's action in assessing duty at 1½ cents per pound, under parapraph 245.

Myrobolan Extract.

The Board has affirmed assessment of duty on myrobolan extract, imported by A De Ronde & Co., at ⅞c. per pound, under paragraph 22 and section 7, Act of 1897. The importers claimed classification under section 6, at 20 per cent.

Tuberculosis Serum.

Lehn & Fink claimed free entry, under paragraph 664, for tuberculosis serum, but the Board has affirmed the assessment of duty as a medicinal preparation at 25 per cent., under paragraph 59, act of 1894.

Castor Oil Plant in India.

The United States Consul Patterson makes the following report at the request of parties in the United States who are interested in the cutivation of the castor oil plant and the manufacture of castor oil:

The castor oil plant is cultivated throughout India, and the oil is frequently employed by the Indian dyers as an auxiliary in certain dye preparations. This oil has the reputation of being one of the best for dressing tanned hides and skins. The uses of the oil are many, it being the only suitable one for lubricating all sorts of machinery, clocks, watches, etc. It is the best lamp oil they have in India and gives an excellent white light, with but little soot—almost an imperceptible amount—which quality no other oils possess. Its use as a medicine is too well known to require more than mere mention.

Though of considerabe value as a manure, from the high amount of phosphates it contains, the castor oil cake is regarded by European cattle breeders as highly injurious to cattle; but in India, a decoction prepared from the cake is given to buffalo cows to increase the flow of milk.

The oil is usually extracted from the seed in two ways—by decoction and expression.

The process of decoction consists in bruising the seeds, previousy deprived of the husks, and then boiling them in water; the oil rising to the surface is skimmed off and is afterwards again boiled with a small quantity of water to dissipate the acrid principle. To increae the product, the seeds are sometimes roasted, but this makes the oil brownish and acrid.

By expression, the seeds, after being thoroughly cleansed from the dust and fragments of the capsules with which they are mixed, are conveyed into a shallow iron reservoir, where they are submitted to a gentle heat. The seeds are then subjected to long-continued pressure by hand screws. The oil is transferred to iron boilers, containing a considerable quantity of water, and boiled for some time, the impurities being skimmed off as they rise to the surface. The clear oil is then carefully removed and the process is completed by boiling it with a small quantity of water.

There are two chief forms of the plant in India, of which there are many varieties. One form is a tall bush, a perennial, that yields a large seed and an abundance of inferior oil. The second is an annual plant, sometimes grown as a pure crop, though more frequently in rows of a field containing other crops. It yields a small seed, the better qualities of which produce the superior oil of commerce and of pharmacy. The oil obtained from the first plant is largely used for illuminating purposes, but it also finds a place as lubricating oil and for many of the industries of Europe, where the more expensive article would be prohibitive in price.

The method of cultivation varies little in the different districts.

The best soil for the cultivation of the plant is red loam, though it grows well on alluvial soil. The land is plowed (in May and June) twice with the ordinary native plow that hardly scratches the top of the ground. It is then well manured and plowed again. In July or August, after the rains begin, the sowing takes place. A man sowing follows the plow and drops the seed at intervals of about a foot, and another plow follows, covering the seed. The seeds germinate in about a week, and a month later the land is plowed twice to kill the weeds. In the fourth or fifth month after sowing, the flowering begins and the capsules are formed. The picking begins in the seventh month and ends in the ninth. The seed pods are gathered by hand, stacked, covered with straw, and weighted. After six days the capsules become soft and rotten. They are then exposed to the sun for two days, and when thus dried are beaten with a heavy mallet about 2 feet long and 1½ feet broad, which removes about half of the seed. The remaining capsules are again dried, and the beating process is repeated, which results in the husking of the balance of the seed. The whole is then cleaned and is ready for the next process—that of extracting the oil.

When grown with other crops, the small variety is sown by driving a plow at pretty wide intervals over the field after the other crops have been put down; the seeds are sown about a yard apart. The product is less than that of the large description, though its value is said to be 50 per cent. higher. The oil of the small kind only, as a rule, is used for medicinal purposes.

The average estimated out-turn per acre is 475 pounds of clean seed, the highest 885 pounds (which is the out-turn when grown as a single crop), and the lowest 235 pounds (when it grows with other crops).

The average estimate of cost of cultivation is $3.25 per acre, the highest $5, and the lowest $1.75.

The average estimated profit per acre is $5, the highest $8.75, and the lowest $1.25, though it is believed that the growing of the castor oil plant could be made much more profitable than these figures indicate.

Goods in Bonded Warehouses.

The appended figures show the quantities or values of merchandise remaining in bonded warehouses April 30, 1898 and 1899:—

	1898.	1899.
Asphaltum, tons	268	158
Argols, lbs	.....	.....
Bristles, lbs	97,392	100,682
Brushes	$19,582	$14,589
Cements, lbs	3,476,713	5,906,210
Chloride of lime, lbs	.....	185,600
Clays, tons	531	1,293
Coal tar colors and dyes	$234,839	$173,634
Cocoa, lbs	9,253	4,161
Cork, mfrs of	$14,148	$15,829
Dyewood extracts, lbs	333,312	460,482
Glass bottles, vials, etc	$37,077	$40,723
Glass, C., C. & W. unpolished, lbs	1,242,458	1,990,032
Glass, C. & S.; polished; unsilvered, sq. ft	2,001	25,271
Glass, C. & S.; polished; silvered, sq. ft	26,486	14,216
Glass, plate, rough, sq. ft	.....	.....
Glass, plate, cast, polished, unsilvered, sq. ft	26,200	21,892
Glass, plate, polished, silvered, sq. ft	20,056	67
Glue, lbs	131,069	106,623
Glycerine, lbs	376,980	153,877
Grease	$5,096	$4,676
Gum chicle, lbs	.....	677,338
Hops, lbs	54,465	10,602
Lead, pigs, etc., lbs	7,834	62,154
Lead in ore, lbs	11,295,938	18,453,767
Linseed, bush	.....	.....
Mineral water, gls	33,946	71,423
Oil, whale and fish, gls	29,007	41,135
Oil, mineral, gls	1,251	1,251
Oil, olive, gls	23,605	16,356
Oil, other fixed	$23,159	$36,327
Oil, essential	$12,230	$7,055
Opium, crude, lbs	20,821	164,929
Opium, prepared, lbs	27,410	6,192
Paints and colors	$18,925	$13,658
Perfumery, etc	$18,258	$16,372
Potash, chlorate of, lbs	7,837	18,354
Soda ash, lbs	90,198	8,697
Soda, caustic, lbs	1,404,750	1,201,723
Soda, other salts of, lbs	218,999	76,387
Soap, fancy, lbs	7,518	5,770
Soap, all other	$833	$1,150
Spices, lbs	419,509	159,710
Sponges	$45,904	$20,293
Sumac, ground, lbs	220,525	362,236

NEW YORK QUININE & CHEMICAL WORKS

Morphine **Acetanilid**
Quinine **Bismuth Subnitrate**
Cocaine **Potassium Iodide**

Your orders will be appreciated, and you may be sure that quality and price will be right.

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NITRATE BARIUM, English
NITRATE STRONTIA, English
OIL LEMON, prime quality
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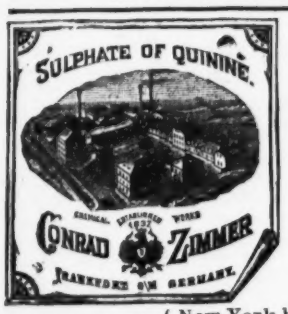

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DRUG MARKET.

NOTE—Our prices are for large lots except when otherwise specified, and buyers of small quantities must expect to pay an advance on these figures. Complete prices current will be found on pages 35 and 36.

Saturday Evening, June 17, 1899.

Advanced.	Declined.
Opium,	Tahiti Vanilla,
Powdered Opium,	Bleached Shellac.
Cinchonidia,	
Menthol,	
Naphthaline (balls),	
Oil, Anise,	
Oil, Orange.	

OPIUM.—The firmness noted in our last issue continued during the early part of this week, and as it was emphasized by the receipt of several orders it culminated in an advance to $2.87½@2.90, which is what holders are asking to-day. In addition to this, one of the houses that has been a factor as a low seller during the past few months has entirely withdrawn from the market, presumably on account of news from primary sources conveying the intimation of a prospective and important upward movement in prices. A cable was received by an importer on Thursday quoting the Smyrna market at 7s. 9d. We have received the following wires from Turkey:

Constantinople, Saturday, June 17, 1899.

Opium is quiet, and 7s. 8d.@7s. 10d. is demanded, but there have been no transactions.

Smyrna, Friday, June 16, 1899.

The price of opium is, nominally, 7s. 10d. The crop estimate has been reduced, and we expect prices will be maintained for a couple of months.

Smyrna, Friday, June 16, 1899.

Holders have advanced their figures, but there are no buyers. Two cases of Karahissar sold at 7s. 7d.

Smyrna, Friday, June 16, 1899.

The opium market is quiet but firm.

Smyrna, Friday, June 16, 1899.

The arrivals of new crop aggregate 125 cases against 13 cases up to this time last year. The market is quiet. The new crop is very fine.

(From Correspondent E.)

Constantinople, June 2, 1899.

Opium is quiet here, but fairly active in Smyrna, where 80 cases were sold yesterday to native speculators and buyers for London and American account at 7s. 6d. f. o. b. Stocks in this part of the world, being so small, there is not much chance of decline between this and arrival of new crop, and even then it is questionable if values will permanently remain much below to-day's parity. Prospects for new crop are presently favorable for a yield of about 8,000 cases.

(From Correspondent D.)

Constantinople, June 2, 1899.

There is no change in prices. Some cases of druggists' quality were sold at 7s. 7d.@7s. 8d. Balukkeser was demanded for speculation, but nothing was done, the stock being exceedingly small and 8s. 2½d. asked.

(From Correspondent G.)

Smyrna, May 26, 1899.

Since writing you last, on the 17th inst., our market has been very quiet, sellers keeping firm and turning a deaf ear to all demands at the former prices of 7s. 6d.@8s.; a buyer, therefore, who had an engagement of five cases Karahissar talequale, to fulfil, was obliged to pay 2d. per pound extra, viz., 7s. 8d., to secure the quantity he required. This purchase, therefore, established the price at 7s. 8d.@8s. 2d., but no further buyers have as yet come forward, so we expect the market will decline again soon. Most of our holders are also buying now new opium in the growing districts; therefore it is to their interest to keep the decline in prices of the old drug, so as to replenish their stocks with new at cheaper prices, as the interior values of opium rise and fall in sympathy with the Smyrna quotations. Before the above mentioned purchase of five cases Karahissar talequale at 7s. 8d., a further sale of three cases was effected at same figure, but of superior quality. The arrivals of opium since June 8, 1898, amount to 1,329 cases, against 3,509 at same period last year.

P. S.—Since writing the above, one of our large buyers came forward and secured ten cases of karahissar talequale at 7s. 6d., but before completing his purchases an interested party paid for similar quality one penny per lb. more, thus preventing the establishment again of former prices. This proceeding on the part of one interested holder (who, besides having a large stock in America unsold, is also holding a large quantity of the drug here) clearly shows that he, as well as others, who are more or less in the same position, will not allow any material decline in prices later on, and as every one expects the price of opium to go below 7s., we may not even see values decline to 7s. 3d.

(From Correspondent C.)

Smyrna, May 27, 1899.

The high prices asked continue to stand in the way of business, though this check put to the demand is sure to be followed by a decline sooner or later. The holders do not seem, however, to trouble themselves about the future of the market. One of them, who also sells on his own account in the United States, appeared as a buyer this week, saying he wanted twenty-five cases, but he had only taken six cases at last paid price, say 7s. 6d., when another holder, who occasionally consigns on his own account to the United States, bought three cases at 7s. 7d., with the sole object of bulling the market, the result being that his neighbor preferred retiring from the market rather than paying the enhanced price. From six to seven cases of prime druggists' grade have also been sold at the equivalent of 7s. 8d.

Arrivals up to date: 1,450, against 3,529 last year. First arrivals of the new crop are expected next week.

(From Correspondent B.)

Smyrna, May 27, 1899.

The large holders who are interested to maintain the prices succeeded again this week with their object; even they obliged the small dealers to want high prices. The small transactions which took place have been settled at prices declining successively, viz.: 7 chests "Karahissar," at 7s. 7½d.; 3 chests "Karahissar," at 7s. 6½d.; 6 chests "Karahissar," at 7s. 5½d., per lb. c. f. New York.

Weather continues to be very favorable for the crop. We think holders will themselves soon decline the prices when the new gums will reach our market. We esteem such moment, which, however, will not remain long, as the more favorable time to purchase, seeing that the decline will be larger than what it has been, and that the rise will succeed very soon. Arrivals till to-day: 1,460 chests, against 3,499 last year. Stock, 1,529 chests, against 2,819 last year.

(From Correspondent F.)

Smyrna, May 27, 1899.

Since my last letter, of the 20th inst., our opium market continued quiet, but without any change in the prices, and we have had only fifteen baskets of purchases this week of the manufacturing talequale Karahissar opium, made for American markets at the parity of 7s. 3d.@7s. 6d. per lb., c. i. f. New York, Boston or Philadelphia, at which rates there are still buyers for the same destination, but large holders do not seem disposed to sell at these rates, owing to the recent reports received from the producing districts about the probable out-turn of the new crop, which, according to the general opinion, is now estimated to yield not more than 7,500 to 8,000 baskets or cases, including Salonica, Malatia, etc., in which case the new, fresh opium will not be selling less than 6s. 6d.@6s. 9d. per lb., which will cost, with the loss of weight, more than 7s. per lb., and as the actual stocks in Turkey represent a less quantity of more than 1,200 baskets on the last year's stocks it is believed that holders will wait now the total render of the new crop before accepting less rates. The arrivals to date are 1,399, against 3,515 of last year at the same period.

The following statistical table will show you that only very occasionally we see the render of our opium crops yield near 10,000 baskets, and you will observe of this table that since 1864 we have had only in the year 1877 9,450 baskets and in the year of 1881 11,000 baskets.

OPIUM CROPS FROM 1864 TO 1898.

	Baskets or Cases.		Baskets or Cases
1864	3,450	1882	4,500
1865	4,400	1883	6,970
1866	1,300	1884	5,400
1867	3,000	1885	7,400
1868	1,650	1886	7,600
1869	3,850	1887	1,800
1870	8,500	1888	7,400
1871	4,450	1889	5,200
1872	4,400	1890	5,320
1873	3,150	1891	7,100
1874	2,450	1892	8,100
1875	6,300	1893	3,100
1876	3,250	1894	4,600
1877	9,450	1895	8,000
1878	6,350	1896	4,500
1879	4,300	1897	8,000
1880	2,100	1898	3,500
1881	11,000		

QUININE.—The market is comparatively quiet, but values are firm, manufacturers quoting on the basis of 36c. and second hands 33@35c., as to brand, age, etc.

CINCHONIDIA.—The spot stocks, which as heretofore reported were not large, were further depleted this week, and as a result of these purchases the market has advanced to 27@28c.

Miscellaneous.

ACETANILID.—Values continue firm at 28@30c., as to holder, quantity, etc. The decision of the Board of General Appraisers admitting this article free of duty has not, as was expected by some, caused a weaker feeling among holders, and there is no disposition to shade the above quoted prices.

ACID, BORACIC.—Manufacturers and dealers report a heavy demand for both city and California at unchanged prices.

ACID, CITRIC.—Domestic manufacturers continue to quote 42c. for barrels and 42½c. for kegs. Outside holders of American-made acid are willing to shade these figures by ½c. There is some foreign-made acid which can be picked up at less than this.

ALCOHOL.—While the demand for grain is not as active as heretofore, values are firmly maintained and there is some talk of a prospective advance. Distillers claim the present prices are too low considering the cost of production, etc.

AMBERGRIS.—San Francisco advices are to the effect that the whaler Charles W. Morgan has found a lump of gray ambergris weighing about 70 pounds.

CARNAUBA WAX.—Three hundred or more bags arrived during the week, but this has not affected the firm feeling that has been evident for several months past. There is no demand at the moment.

COCAINE.—So far there has been no change in values, but intimations of an early advance are prevalent.

COCOA BUTTER.—The situation is in

Schieffelin & Co.

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Druggists Sundrymen,

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has by mutual consent been dissolved, and in future the two partners, viz.: W. R. Sanderson and Arthur A. Barrett, will continue business each on his separate account and under the separate styles of

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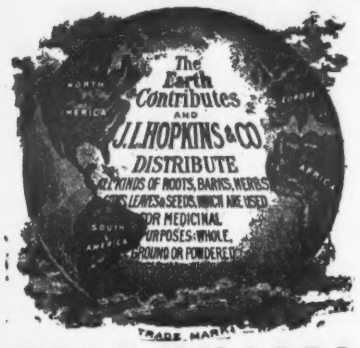

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favor of the buyer, with holders quoting bulk at 33@34c., and cake at 37@39c., all as to brand, quantity, etc.

COD LIVER OIL.—Business is almost entirely limited to contracts for future delivery, which are being entered at $20@22 for the standard brands. We have received the following cables from Norway:

Bergen, Thursday, June 15, 1899.

The catch at Finmarken has so far produced 5,800,000 fish, which will yield 1,340 barrels of oil. The market is firm at $14, f. o. b.

Aalesund, Friday, June 16, 1899.

The Finmarken fishery up to this time will produce 1,339 hectoliter of oil. The market is quiet and holders continue to ask 58s., c. o. b. for the finest Lofoten.

We have received the following mail dvice from primary sources:

Aalesund, June 2, 1899.

The expectation of an improvement in the Finmarken catch, which I mentioned in my last report, was not realized, as the fishing in nearly all districts last week continued to be poor. The result of the week's fishing will only increase the quantity of cod liver oil to be produced to the extent of 157 hectoliter, making the total production up to date 782 hectoliter, against 1,799 hecto in 1898, 1,762 hecto in 1897 and 8,727 hecto in 1896. The market is lively and large sales have taken place at rising prices. Present quotation is 58s., f. o. b. The tendency is firm.

CUTTLEFISH BONE.—Supplies are still obtainable on spot, in a limited way, at 12c. for Trieste bone. Our Trieste correspondent writes us as follows, under date of June 3:

Stocks of hard bones, natural and selected, are quite exhausted; the softer variety is still available, but is held at very high prices, which buyers are not inclined to pay. The new catch will now begin very soon, and it is to be hoped that it may turn out satisfactory, as a good demand is making itself felt already. Quotations cannot yet be given, but we presume they will be about on the same basis as in the last year.

ERGOT.—Values continue firm at 29@30c. for German, despite reports of sales at 26@27c. Our Hamburg correspondent writes us as follows:

June 5, 1899.

The stocks of ergot are almost exhausted here, owing to large orders, presumably from home manufacturers, and only the most pressing wants seem to have been filled. High limits have been laid out to the Russian gathering districts, but no more supplies seem to be forthcoming.

GLYCERINE.—The situation in both C. P. and dynamite is as heretofore reported, both being firm with upward tendency.

HAARLEM OIL.—Old style is obtainable on spot, and also to arrive in July, at $1.75, stamps extra.

HOPS.—The export demand has slacked up, but brewers are still liberal purchasers, especially of low grade goods. We quote as follows:

New York State, crop of 1898, choice	15@16
New York State, crop of 1898, prime	13@14
New York State, crop of 1898, low to med.	10@12
New York State, crop of 1897	7@10
New York State, olds	3@ 7
Pacific Coast, crop of 1898, choice	16@17
Pacific Coast, crop of 1898, prime	14@15
Pacific Coast, crop of 1898, low to med.	10@12
Pacific Coast, crop of 1897	6@10
Pacific Coast, olds	2@ 6
German, etc., crop of 1898	45@53

JAPAN WAX.—The market is firm, and 7¼@7½c. is being paid, as to quantity, etc.

LYCOPODIUM.—Values are firmly maintained at 29@30c., for no label, and 32c. for Pollitz. The demand is fair. Our Hamburg correspondent writes:

June 5, 1899.

Lycopodium is quiet, but the stock is not large. The favored brand, Pollitz, is quoted for the few remaining cases as high as 31c. per lb., while other kinds are offered down to 28c., c. i. f. steamer, New York.

MENTHOL.—The advance in the primary market, which we noted last week, has caused local holders to advance their views to $2.20@2.30, as to brand, etc. Some business has been done during the week.

NAPHTHALINE.—Balls are again somewhat scarce, and the spot quotation has been marked up to 4@4½c., as to holder, etc. Crystals and flake are unchanged.

SUGAR OF MILK.—Manufacturers of all brands are now able to fill orders from spot supplies, but values are firm and unchanged.

Balsams.

Central American copaiba has sold during the week at 35c., ex dock, but 36@37c. represents the market for warehouse supplies. Both varieties of fir are in firm position, and our advices from Oregon are to the effect that the article may be considered as temporarily out of that market. Tolu is easy at 30@31c., and sales were made during the week, ex dock, at 28c.

Barks.

Nothing has been done in cascara sagrada during the week, and the old quotation of 6⅝@7½c., as to age, etc., stands. Our Portland correspondent writes, under date of June 10th, as follows:

Some interest in cascara sagrada is now being evinced by both buyers and sellers, but no bark has come in yet, and until it is actually on the market, ready for shipment, its value will not be declared. The 300 ton contract that was spoken of earlier in the season, seems to be regarded with some question, and anyhow, does not cut any figure in establishing a price.

Cascarilla is scarce and firm, and costs about 7¼c. to lay down. The quotations of holders of spot stock, however, range from 7½@8c., as to quality, etc. Canella is also scarce, and 5@7c. is asked. Jamaica dogwood is not plentiful on spot, and is held at 5½@6½c. Northwestern prickly ash shows an upward tendency, 10@11c. having been paid in the country for some small parcels. Our quotations of 13@15c. is somewhat nominal, in view of the small spot supplies. Sassafras is quiet, and in plentiful supply, and 6@8c. is quoted. The inside figure might be shaded on a firm offer.

Beans.

A good jobbing business is reported and all varieties are firm, with the exception of Tahitis, which are now obtainable on spot at $2.40@$2.50, with prospects of a further decline, as stocks in San Francisco are heavy, and there is a disposition on the part of holders there to get rid of their goods.

Berries.

This department is without special feature, there having been no price changes and but a moderate jobbing business. Junipers are still obtainable at 2⅛@2⅜c., as to quality, quantity, etc.

Essential Oils.

Anise is firmer again, and holders have marked up their quotations to $1.42½@1.45. Bergamot continues in firm shape, but there has been no advance. Cassia is weak at 80c.@$1.05, as to test, etc. Citronella is obtainable at 23c. in drums, and 24c. in cans. Clove is unchanged in price, and holders ask 55@57½c., but, in view of the fact that the spice is selling at cheaper rates for future delivery, the oil will probably follow suit in a month or two. Lemon is weak and uninteresting. Sweet orange has advanced in the primary market to 6s. 9d@7s., and spot quotations have consequently been advanced to $1.60@1.80, as to brand, quantity, etc. Peppermint is decidedly firmer, in view of apparently authentic reports from the West that the already limited plantations are being still further decimated by the presence of cut worms in the fields, and the prevailing dry weather. Some estimate that the next distillation will be about forty per cent. less than it would have been if the aforesaid damage had not occurred.

One of our Constantinople correspondents writes us in regard to rose, as follows:

June 2, 1899.

The distillation is expected to finish to-day or to-morrow. After the first days, the weather was better; then it was again hot, and has continued unfavorable, if the temperature that we have had here has also been experienced in the Balkan valleys.

Flowers.

A fair inquiry for calendula is reported, and the market is firm at 45c. There is not much doing in chamomiles on spot, but German are offered to arrive at 30c. and Hungarian at 22c. Our Hamburg correspondent writes:

June 5, 1899.

The true German flowers will only appear on this market in about a fortnight, in any quantity to speak of. The southern districts have further advanced already, and their first deliveries may soon be expected. Of these kinds only the first pickings are desirable; later gatherings have usually overmatured and do not keep well, but will easily decay and fall to pieces. For finest Hungarian, up to 16 cents per lb., c. i. f., New York, has been readily paid, while the later pickings may be had down to 12 cents.

We have the following advices from Trieste in regard to insect flowers, the first communication being by cable:

June 16, 1899.

The market for insect flowers is dull in con-

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WRITE FOR PRICE LIST AND SPECIAL CIRCULARS.

sequence of heavy arrivals, and open flowers of the new crop are obtainable at 50s., c. and f., New York. For half-closed and closed, proportionately higher figures are asked.

June 6, 1899.

Flowers: Insect Dalmation. Old flowers are rather neglected, and prices of half closed and open show therefore a slight decline. We quote: 1898 closed, 84@100s., c. and f., New York; 1898, half closed, 52s. 6d.@67s. 6d., c. and f., New York; 1898, open, 48s. 6d.@49s. 6d., c. and f., New York.

Arrivals during May amounted to 825 cwts. and sales to nearly 1,100 cwts., so that we have entered into the new campaign with a stock of 3,230 cwts. of old flowers, as against 4,410 cwts. in 1898 and 4,400 cwts. in 1897, which means a deficit of over 1,000 cwts. for this year. Prices are not at all in accordance with this statistical position. They were on June 1: Closed, 1898, 100@112s. 6d.; 1897, 138@155s. Half closed, 1898, 57s. 6d.@79s.; 1897, 96@112s. 6d. Open, 1898, 43@45s.; 1897, 80s. 6d.@83s. The present basis can therefore be considered as quite safe, and buyers should not hesitate to cover themselves for some time to come at this portune moment. As we already cabled you, w flowers are selling smartly, half closed at 64s. and closed at 84s. per cwt., c. and f., New York. A fine lot of closed flowers fetched 97s. 6d. to-day. Wild closed and cultivated open flowers are not yet available; they always appear three to four weeks later than the other grades; it will therefore take at least another fortnight or three weeks until our market is fully stocked.

Gums.

The report circulated through the trade and printed by a daily newspaper as a fact, that 400 boxes of Curacoa aloes had been sold ex-dock at 2⅜c., and that the market had declined to 2¾@3c., is untrue. No arrivals of the new crop have been bought by dealers at less than 2⅝c. Arabics, asafoetida, benzoin, camphor, chicle, myrrh, senegal and tragacanth, are all conspicuous by their firmness. In regard to tragacanth, one of our Constantinople correspondents states that only some 250 cases of white flake exist on that market, the remainder of the stocks, amounting to about 600 cases, being yellows and inferior grades. From Trieste we have the following report by mail:

June 6, 1899.

Myrrh: Fine pale in sorts is in good supply and is offering at 66@68s. per cwt., cost and freight, New York, as to quality and seller. Owing to the long scarceness the article is in good request.

Styrax Liquid: Prime, genuine merchandise in barrels is offering slightly cheaper at 54s. 6d. per cwt., cost and freight, New York. Equal quality in cases of 2 tins, to arrive in two to three weeks, is held at 56s. 9d., same conditions.

Hog Tragacanth: Our market is still well supplied with different grades, which are offered at 28s. 6d.@31s. 6d. per cwt. in bags gross for net, c. & f., N. Y., as to quality.

Herbs and Leaves.

Buchu continue in plentiful supply, and 13@15c. will buy short, and 16@18c. long. Cannabis indica are held at 13½@15½c. for tops. Siftings can be had at 9@10c. Both varieties of coca continue scarce and firm. Damiana is offering at 7@8c., and this figure is low compared with what is being asked on the coast. Henbane is firm at 10½@12c. Laurel are obtainable at 3¼@3¾c. Sennas are firm, with upward tendency.

In regard to narcotic herbs, our Hamburg correspondent states that that market seems as bare as it has seldom been before. No surplus stock of the previous season being carried over in that market, he adds that all these articles are likely to command full prices again in the coming season. Our report from Trieste is as follows:

June 6, 1899.

Sage, Italian, picked: Stocks are very light and nothing is available below 7s. 6d. c. & f., N. Y.

Senna, Alexandr. are in more plentiful supply now, after a period during which arrivals had almost ceased. The actual quotations are as follows: Whole leaf, 87s., in cases, c. & f., N. Y.; three-quarter leaf, 58s., bales, c. & f., N. Y.; half leaf, 39s. 6d., bales, c. & f., N. Y.; siftings, 27@37s., c. & f., N. Y.; pods, prime light, 54s. 6d., c. & f., N. Y.

Roots.

Ipecac is again higher in London, sales having taken place there early in the week as 16s., and later on several bales were cabled sold at 17s. While all local holders have not altered their prices, a general advance is looked for early next week, as this market is now from 25@50c. lower than the London market. The quoted range is $3.75@4.25. Berberis aquifolium is firm at 9@10c., and our reports from Oregon are to the effect that only a very limited quantity of prime root is visible in that market, and is being held at 5c. Culvers is scarce and our quotation of 10@12c. somewhat nominal. German dandelion is in fair request and is selling at 8¾@9½c. Gentian is firm at 3¾@4½c. There is no improvement in the situation of orris. Supplies of Texas snake are obtainable at 28c., but there is not much demand at the moment. Prime white squills is held at 3¾@4c. Our Trieste correspondent writes that Syrian alkanet is offering advantageously at 16s., cost and freight New York. In regard to gentian he states that the cheap lots which were in that market are now all sold, and that the quotation must be raised to 16s., cost and freight, New York.

Seeds.

Cable advices from Constantinople report that new crop canary seed is now held there at 8s. 3d. for shipment in two or three months, and that there is no improvement in the crop prospects. Spot quotations have not been advanced further than reported last week, but further appreciation is predicted notwithstanding the fact that stocks here are very heavy. Our Constantinople correspondent writes as follows:

June 2, 1899.

Since our last report canary seed has further risen, and 7s. 9d. is the parity of the price asked here, with very few sellers. The drought continues, and another week will decide the fate of the crop.

Dutch caraway continues firm, but there has been no price change. German colchicum shows an upward tendency in view of the light spot stocks and the fact that the new crop is still about three months off. Malta Cummin is held locally at 6½@7c. Our Hamburg correspondent writes that the market for prime Malta is easier, and that variety is now obtainable at 6c., c. i. f. steamer New York, while sifted African may be had at 5½@5¾c. per lb. as to sifting. He also reports, with regard to foenugreek that a very lively inquiry has sprung up for the Mogador kind; that the old crop is exhausted, and that for new crop, for August-September shipment, a parity of 1.75 cents, c. i. f. steamer, New York, will be rock-bottom. The Hamburg quotation for sabadilla is 8¾@9c., c. i. f. steamer, New York, as to quantity. On spot it is worth 10@12c.

Our Trieste correspondent cables us as follows:

Friday, June 16, 1899.

New crop brown mustard seed is offered at 23s 3d., cost and freight New York, July-August shipment.

One of our Duluth correspondents writes, under date of June 6, as follows:

Caraway seed is firmly held, with a lively demand. The crop reports are better, owing to the fine weather.

Shellac.

A fair jobbing business is in progress and holders quote 14½@16½c. for TN, as to quality, etc. Bleached is easier again and 16@17c. will buy.

(Continued on Page 20.)

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Linseed, city, raw, in bbls.	℔ gal.	39 @40
boiled, in bbls.		41 @42
Out of town on spot		36 @37
Calcutta, raw, in bbls.		54 @—
Varnish oil, American		— @—
Calcutta		54 @56
Cottonseed, crude, prime		20 @21
" " f.o.b.mills		14 @18
Crude, off quality		18 @19
Yellow summer, prime		26 @26½
Yellow summer, butter		30 @31
Yellow summer, off quality		25 @25½
White summer		30 @32
Yellow winter		30 @32
White winter		31 @32
Soap stock	℔ lb.	75 @80
Olive	℔ gal.	52 @57
Olive soap stock		3¾@ 4¼
Palm, kernel		4½@ 4¾
Lagos		5¼@ 5½
Castor No. 3		9¾@10¼
Cocoanut, Ceylon		5¾@ 6
Cochin		7½@ 7¾
Corn		3 60@4 00
Peanut, white		60 @—
yellow		55 @—
Rosin, first run	℔ gal.	10½@—
Second run		12½@—
Third run		14½@—
Fourth run		16½@17
Rapeseed, in bbls, No. 1		57 @58
No. 2		52 @54

Animal and Fish Oils.

Black fish, crude	℔ gal.	— @—
Bleached winter		— @—
Cod, domestic, prime		33 @35
Newfoundland		38 @40
Degras, English	℔ lb.	2¾@ 3
French		5 @ 5½
German		2½@ 2¾
Herring	℔ gal.	— @—
Lard, prime		42 @44
Extra No. 1		35 @37
No. 1		30 @31
No. 2		26 @27
Menhaden, prime, crude		23½@24
Good merchantable		23 @24
Brown strained		27 @28
Light strained		28 @29
Bleached winter		— @31
Ex. bleached winter white		34 @35
Neatsfoot, white		50 @52
Prime		44 @45
Extra No. 1		38 @39
Dark		28 @30
20° cold test		75 @80
30° cold test		65 @70
Red, Elaine		28 @30
Saponified	℔ lb.	4 @ 4½
Sea elephant, bleached winter	℔ gal.	48 @50
Natural water		43 @45
Seal, bleached water white		— @—
Sod		32 @33
Sperm, crude		50 @52
Natural spring		50 @52
Natural winter		55 @—
Bleached spring		55 @57
Bleached winter		60 @—
Tallow, prime		43 @44
Dark		30 @32
Whale, crude		— @—
Natural winter		— @43
Natural spring		— @42
Bleached spring		— @44
Bleached winter		— @45
Extra bleached winter		— @48

Mineral Oils.

Black reduced, 29 gravity, 25@30 c. t.		7 @ 7½
29 gravity, 15 cold test		8 @ 8½
29 gravity, zero		11 @12
Summer		6½@ 7
Cylinder, light filtered		13 @15½
Dark filtered		11 @16
Extra cold test		21 @25
Dark steam refined		8 @13
Natural, Franklin, 32 gravity		10 @15
Smith's Ferry, 33@34 gravity		7½@ 8½
West Virginia, 29 gravity		22 @24
Neutral filtered, lemon, 33@34 gravity		13 @18½
White, 33@34 gravity		21 @23
32@34 grav. bloomless		13 @18½
32 grav. wool grade		11 @14
Paraffine, high viscosity		20 @25
903-907 sp. gr.		9¼@ 9½
903 sp. gr.		8¼@ 8½
883 sp. gr.		7½@ 7¾
875 sp. gr.		7¼@ 7½
865 sp. gr.		7¼@ 7½
Red Paraffine, No. 1		8¾@ 9¼
No. 2		8¼@ 8¾
Spindle No. 1 Filtered		15½@16½
No. 1		12½@13½
No. 2		11½@13½
No. 3		10½@11½
No. 4		10 @10½

Oil Cake, Meal, Etc.

Calcutta cake, city	℔ ton.	23 00@23 50
City domestic		22 50@23 00
Western, in bags		22 50@23 00
Cottonseed cake at Memphis		15 50@16 50
at New Orleans		19 00@20 00
at New York		22 75@23 00
Cottonseed meal at Memphis		15 50@16 50
at New Orleans		19 00@20 00
Corn cake		22 00@22 50
" " meal		22 00@22 50

Wax, Lard, Tallow, Etc.

Paraffine wax, crude	℔ lb.	3¾@ 4¼
Refined 120 m. p.		— @ 5¼
125 m. p.		— @ 5½
130 m. p.		— @ 6
135 m. p.		— @ 6¼
140 m. p.		10½@11½
Candles, adamantine, 6s, 14 oz.	℔ lb.	6¼@ 8
Paraffine, 4s, 6s and 12s		7 @ 8
12 oz.		5¼@—
12s, 16 oz.		9 @—
14 oz.		7 @—
12 oz.		—@ 6
Patent Sperm, 4s and 6s		38 @40
Sperm, 4s and 6s		33 @34
Stearic Acid—Plain 4s, 6s, 8s.		9 @—
patent ends, 4s and 6s		9½@—
cartons, 6 lbs. each		9½@10
Lard, spot, tierces		5 15 @ —
export, pkgs.		4 90 @ —
compound		4½@ 4¾
neutral		— @ —
Oleo stearine		5¾@ 5¾
Lard "		5 15 @5 40
Tallow		4 3-16@ 4½
Stearic Acid		7½@ 8

Naval Stores.

Spirits turpentine	per gal.	39¼@ 39¾
Rosin, strained	per bbl.	1.30 @1.32½
Good strained		1.30 @1.32½
E		1.37½@1.40
F		1.47½@1.50
G		1.52½@1.55
H		1.55 @1.60
I		1.70 @1.75
K		1.85 @1.90
M		2.10 @2.15
N		2.30 @2.35
Window glass		2.45 @2.50
W W		2.65 @2.70
Tar, regulars		2.00 @2.10
oil barrels		3.50 @3.60
Pitch		— @1.70

Paints, Varnishes, Etc.

White Lead, Zincs, Etc.

White lead, American dry	℔ lb.	5 @ 5½
in oil		5¾@ 6¼
English in oil		7¼@ 8¼
Litharge, American powdered		5½@ 5¾
English flake		7¾@ —
Glassmakers'		7¾@ 8
Red lead, foreign		7¾@ 8¼
American		5¾@—
Orange mineral, American		7¾@ 8
English		8¾@ 9¼
French		10¾@10¾
German		8½@ 9¼
China white		9 @10
Flake white		8 @12
Cremnitz white		14 @18
Zinc white, Paris G. S., 50 bbls. 9⅞ less		4 ℔ ct
G. S., 25 bbls. 9⅞		2 ℔ ct
G. S., 10 bbls. 9⅞		1 ℔ ct
R. S., 50 bbls. 8⅝		4 ℔ ct
R. S., 25 bbls. 8⅝		1 ℔ ct
R. S., 10 bbls. 8⅝		1 ℔ ct
Antwerp, R. S., 50 bbls. 7⅞		4 ℔ ct
R. S., 25 bbls. 7⅞		2 ℔ ct
R. S., 10 bbls. 7⅞		1 ℔ ct
G. S., 50 bbls. 8⅝		4 ℔ ct
G. S., 25 bbls. 8⅝		2 ℔ ct
G. S., 10 bbls. 8⅝		1 ℔ ct
G. S. in poppy oil		11¾@12
R. S. in poppy oil		10½@11¼
American extra dry		4½@ 5
Florence, Green Seal		8 @ 8½
Florence, Red Seal		7½@ 8
German		6¾@ 7

Dry Colors.

REDS.

Carmine, No. 40	℔ lb.	2 15 @2 75
Crocus martus, imported		2½@ 3½
standard American		1 @ 2½
Indian red, standard American		3 @ 3¼
English		4½@ 8½
Rose pink, American		7 @ 9½
English		7½@ 9½
Tuscan red, English		7 @ 10
Turkey red, English		7½@ 10
Venetian red, English, prime		1¾@ 2
2d quality		1½@ 1¾
American		60 @ 90
Vermilion, imported English		65 @ 80
Am. quicksilver, bulk		— @ 61
bags		— @ 62
Chinese		80 @ 90
American		10 @ 20

BLACKS.

Carbon	℔ lb.	6 @10
Drop, American		2½@ 4
English		5 @10
Ivory		9 @20
Lamp, commercial		3 @ 5
refined		8 @10
calcined		12 @20
fine spirit		20 @35

BLUES.

Celestial	℔ lb.	5½@ 8
Chinese		31 @36
Prussian		28 @36
Prussian Foreign		30 @32
Refiners'		60 @70
Soluble		33 @36
Ultramarine		7 @35
Verditer		25 @30

BROWNS.

Sienna, Italian, burnt & powdered		2½@ 5
burnt lump	℔ lb.	1½@ 3
raw, powdered		2½@ 5
raw, lump		1½@ 3
American burnt and powdered		1½@ 1½
raw		1½@ 1½
Spanish brown		½@ 1
Umber, Turkey, burnt and powdered		2½@ 3½
burnt lumps		2½@ 4
raw and powdered		2½@ 3½
raw, lumps		2½@ 2½
American, burnt		1½@ 1½
raw		1½@ 1½
Vandyke brown, German		2½@ 5½
American		1½@ 2½

GREENS.

Chrome, chemically pure	℔ lb.	10 @25
extra		12 @15
super		10 @12
Chrome, common	℔ lb.	5 @ 6
Paris, pure		12½@14
in pulp		— @—
Verdigris, French		16 @20

YELLOWS.

Chrome	℔ lb.	10 @25
Ocher, Rochelle		1¼@ 1¾
washed Dutch		4¾@ 5
French		1¼@ 2½
golden		3½@ 4
domestic	℔ ton.	$10 00@15 00

Miscellaneous.

Barytes, prime white	℔ ton.	18 00 @20 00
foreign floated		19 00 @20 00
domestic floated		19 00 @20 00
off color		14 50 @17 00
Crude, No. 1		9 00 @10 00
No. 2		8 00 @ 8 25
No. 3		7 75 @ 8 00
Blanc fixe	℔ lb	2½@ 2¾
Bronze powder		45 @ 2 50
Brocades		45 @ 1 00
Chalk	℔ ton	2 15 @ 2 25
Clay, China, imported	℔ ton.	11 00 @17 00
domestic		8 50 @10 00
Cobalt oxide	℔ lb.	1 76 @ —
Feldspar	℔ ton.	12 50 @16 00
Fuller's Earth, lump	℔ 100 lbs.	75 @ 90
powdered		75 @ 90
Marble dust	℔ bbl.	75 @ 1 00
Manganese, car lots	℔ ton.	15 00 @17 00
jobbing	℔ lb.	3 @ 5
Magnesite, raw	℔ ton.	7 00 @ 8 00
calcined, pow'd.	℔ lb.	— @ 1¾
Plaster	℔ bbl.	— @ 1 40
dentists'		1 75 @ 2 00
Pumice stone, orig'l cks.	℔ lb.	2 @ 2½
selected lumps in bbls.		5 @ 15
pow'd pure, bbls.	℔ 100 lbs.	1 85 @ 2 50
Putty, in bulk		1 70 @ —
bladders		2 20 @ —
1 to 5 lb. tins		3 25 @ —
Rottenstone, casks	℔ lb.	6 @ 7½
selected, lumps		6 @ 14
powdered, in bbls.		3¼@ 3½
Silex	℔ ton.	12 00 @18 00
Smalt, German blue	℔ lb.	14 @ 15
super black		— @ —
Talc, American	℔ 100 lbs.	50 @ 65
French		1 10 @ 1 25
Italian		1 50 @ 2 00
Terra alba, American No. 2		50 @ 60
English		85 @ 1 00
French		80 @ 1 00
White, commercial		42½@ 50
gilders'		47 @ 56
extra gilders'		57 @ 64
American, Paris		65 @ 70
English cliffstone		75 @ 1 20

Glues.

Extra white	℔ lb.	16 @25
Medium white		13 @15
Cabinet		12 @19
Low grade		12 @14
Foot stock, white		10 @13
brown		9 @12
Irish		13 @15
French		12 @25
German hides		13 @16
common		9 @12

Varnish Gums.

Asphaltum, Cuban prime	per lb.	4½@—
Egyptian		5¾@ 6½
Copal, Sierra Leone cleaned		60 @75
Zanzibar, bold white		60 @70
medium white		55 @65
bean and pea		33 @35
Manila, pale		15 @17
bright amber		10 @14
standard		8 @10
Damar, Batavia		14 @15
Singapore		9 @12
Kauri, standard		24 @25
No. 2		19 @20
No. 3		14½@15
hard scraped		— @28½
light hard scraped		36 @40
picture quality		60 @68
pale and fine selected		— @80
Sandarac		— @16

Window Glass.

AMERICAN LIST.

Single.

United Inches.	Sizes.	Prices per Fifty Feet. AA	A	B	C
25	6x 8 to 10x15	$17 50	$16 25	$15 50	$15 00
84	11x14 to 14x20	20 00	18 50	17 25	16 50
40	12x13 to 16x24	22 00	20 00	18 50	17 75
50	16x22 to 20x30	25 00	23 00	21 00	....
54	20x20				
60	15x36 to 24x30	27 00	24 50	22 00	....
70	20x28 to 24x36	30 00	26 75	24 00	....
80	26x34 to 30x40	33 50	30 50	27 00	....
84	28x32 30x60 32x36 34x36 to 30x50	40 00	36 50	32 00	....
	30x54	41 25	37 50	33 75	....

Double.

United Inches.	Sizes.	Prices per 50 Ft. AA D	A D	B D
25	6x 8 to 10x15	$23 50	$22 00	$21 00
54	11x14 to 14x20	28 50	26 25	24 50
	12x13 to 14x20	28 50	26 25	24 50
40	10x28 to 16x24	31 25	28 50	26 25
50	18x22 to 20x30	34 50	31 75	28 75
	20x20 to 20x30	24 50	31 75	28 75
54	15x36 to 24x30	36 50	33 75	30 50
60	26x28 to 24x36	41 00	37 25	33 75
70	24x40 to 30x40	47 00	42 75	38 00
	28x32 to 30x40	47 00	42 75	38 00
	30x30 to 30x40	47 00	42 75	38 00
80	32x38 to 30x50	55 00	50 50	45 50
	34x36 to 30x50	55 00	50 50	45 50
84	30x52 to 30x54	57 00	51 75	46 50
90	30x56 to 34x56	58 50	54 00	48 50
94	34x58 to 34x60	63 00	57 50	52 00
100	36x60 to 40x60	66 50	60 50	50 00

Sizes above 100 inches $10.00 per box extra for every 5 inches. An additional 10 per cent. will be charged for all glass more than 40 inches wide. All sizes over 52 inches in length, and not making more than 91 united inches, will be charged in the 94 united inches bracket. Discount, 10 and 20 per cent.

Metallic Paints.

Brown		16 00@20 00
Red		16 00@20 00

Colors in Oil.

Black coach Japan	℔ lb.	18½@20
in oil		12 @13
drop		12 @13
lampblack, prime		13 @14
medium		10 @11
Blue, Chinese		35 @40
Prussian		30 @35
ultramarine		12 @16
Brown, sienna, burnt		8 @13
raw		8 @13
umber, burnt		8 @12
raw		8 @12
Vandyke		8 @13
Green, chrome		8 @14
Paris		20 @24
Red, Indian		12 @15
Venetian		6 @ 8
Yellow, chrome		13 @15
ocher, French		6 @ 8

Drugs

Opium.

Opium, natural (cases)	℔ lb.	2 87½@2 90
as wanted		2 90 @2 92½
powdered		3.70 @4.00

Morphine.

Morphine, bulk	℔ oz.	1 95 @2 05
oz. vials		2 00 @2 10
⅛ oz. vials, 2½ oz. boxes		2 20 @2 30
⅛ oz. vials, 1 oz. boxes		2 25 @2 35

Codeine.

Codeine, Pure, bulk, 5 oz.	℔ oz.	4.50 @4.65
ozs.		4.55 @4.70
eighths		4.75 @4.90
Salts, 45c. per oz. less than pure.		

Quinine.

Quinine, 100 oz. tins	@36
50 oz. tins	@36½
25 oz. tins	@37
5 oz. tins	@38
1 oz. tins	@41
1 oz. vials	@43
Cinchonidia, bulk	27 @28

Miscellaneous.

Acetanilid, in barrels	℔ lb.	28 @ 30
Acid, benzoic, true	℔ oz.	9 @ 9½
ex toluol	℔ lb.	46 @ 47
boracic, crystals, city		10¾@ 11
Calif.		10 @ 10¼
powdered, city		11¼@ 11½
Calif.		10½@ 10¾
carbolic, drums		14½@ 15½
bottles		22 @ 33
tins		17½@ 19½
citric, barrels		41½@ 42
kegs		42 @ 42½
pyrogallic		1 95 @ 2 05
salicylic		36 @ 38
Alcohol, 94%	℔ gal.	2 44 @2 46
ref. wood, 95%		— @ 75
97%		— @ 80
purified		1 20 @ 1 50
Almond oil, sweet, almonds	℔ lb	37½@ 42
peach kernels		23 @ 26
Aloin		38 @ 40
Ambergris, black	℔ oz.	15 00 @17 50
grey		25 00 @26 50
Ammonia, carb., domestic	℔ lb.	7¼@ 7¾
foreign		7½@ 7¾
Antimony, Japan needle		7 @ 7¼
Areca Nuts		— @ 20
Arrowroot, Bermuda, genuine		40 @ 45
So-called		15 @ 22
St. Vincent, bbls.		11½@ 13½
cans		12 @ 14¾
Balm of Gilead Buds		— @ 30
Barium chloride		2¼@ —
chlorate		— @ 28
nitrate		6 @ 7
Barbadoes tar, in bbls	℔ gal.	40 @ —
Bay rum, bbls		2 25 @ —
Beeswax, white, pure	℔ lb.	45 @ 50
yellow		28 @ 30
Bismuth, citrate		— @ 1 75
subcarbonate		1 35 @ 1 40
subgallate		1 15 @ 1 25
subnitrate		1 20 @ 1 25
Blue Pill		35 @ 37
Borax		7¼@ 7¾
in bags		— @ 7
powdered		7¼@ 7¾
Bromine, bulk		45 @ 50
Burgundy pitch		2½@ 3
Caffeine		3 75 @ —
Calomel, American		75 @ 75
English		— @ 1 00
Cantharides, Chinese		45 @ —
powdered		45 @ 50
Russian		42 @ 45
powdered		50 @ 55
Carnauba wax, No. 1		20 @ 22
No. 2		13½@ 14½
No. 3		9½@ 10½
Castor oil, city, bbls		10½@ 11
cases		11 @ 11¼
Castile soap, white, pure		9½@ 10
Marseilles		6¼@ 7
green, pure		7¼@ 7¼
ordinary		6 @ 6½
mottled, pure		5½@ 7¼
ordinary		4½@ 5
Cerasin, yellow		10½@ 11¼
white		11 @ 13½
Chalk, precip.		4 @ 6
Chloral hydrate, crusts, 25 lb. jars		— @ 1 15
crystals, 25 lb. j's		— @ 1 20
Chloroform		40 @ —
Clover Tops, red		7 @ 8
Cocaine, muri, bulk	℔ oz.	3 25 @ 3 45
oz. vials		3 30 @ 3 50
Cocoa butter, 12 lb. boxes	℔ lb.	37 @ 39
bulk		35

Codliver oil, Newfoundland	℔ gal	60 @	80
Norwegian	℔ bbls.	20 00 @	22 00
Colocynth apples, Spanish	℔ lb.	16 @	20
Trieste		30 @	35
Corrosive sublimate		64 @	66
Coumarin, refined		6 50 @	8 00
Cuttlefish, Trieste		12 @	—
Cologne, spirit	190° ℔ gal.	1 30 @	1 31
Dragon's blood, mass	℔ lb.	18 @	35
reeds		65 @	75
Epsom salts, per 100 lbs.		1 00 @	1.05
Ergot, German		29 @	30
Russian		29 @	30
Spanish		38 @	40
Ether, 1880		— @	60
washed		— @	64
1890		— @	66
Eucalyptol		— @	1 50
Formaldehyde		18½@	19
Fusel oil	℔ gal.	60 @	75
Gelatine Silver	℔ lb.	27 @	28
Gold		33 @	45
Glucose, 41°		— @	1 47
Glycerine, C. P., drums		12 @	12½
C. P., bbls.		12½@	13
C. P., cans		13 @	13½
Dynamite		11 @	11¼
Grape sugar, 70°		— @	1 47
Guarana		35 @	37
Haarlem oil, old style		1 93 @	2 25
New style		— @	2 50
Hypophosphite, lime		1 05 @	1 10
potash		1 05 @	1 10
soda		1 05 @	1 10
Iceland moss		5 @	6
Insect powder		15 @	27
Iodine, re-sublimed		2 90 @	2 95
Iodoform		3 00 @	3 05
Irish moss, ordinary		5 @	8
bleached		10 @	11
Isinglass, Russian		3 10 @	3 15
American		45 @	50
Japan wax		7¼@	7½
Kola Nuts, African		6½@	8
Licorice, mass, Greek		8 @	12
Spanish		17 @	24
stick, domestic		16½@	23½
foreign		23 @	26
Lithia, carb.		3 30 @	—
Lupulin		18 @	25
Lycopodium		29 @	32
Manna, large flake		50 @	55
small flake		23 @	26
sorts		18 @	22
Menthol		2 20 @	2 30
Myrbane oil		9 @	10
Musk, pods, Cab	℔ oz.	4 00 @	6 00
Nepaul		21 00 @	22 00
Tonquin		8 00 @	15 00
grain, Cab		7 50 @	8 50
Canton, extra		— @	1 00
good		18 @	20
Nepaul		16 50 @	17 50
Tonquin		17 00 @	23 00
druggists'		15 50 @	16 50
Mustard oil	℔ gal.	37 @	38
Naphthaline, balls	℔ bbl.	4 @	4½
crystals		2¼@	2¾
flakes		2¾@	3
Nux vomica		2¼@	3
Phosphorus	℔ lb.	40 @	1 00
Pilocarpine	℔ oz.	— @	7 00
Poppy heads	℔ lb.	15 @	18
Precipitate, red	℔ lb.	83 @	85
white		88 @	90
Potash Perman		14 @	15
Potassium, bromide, bulk		46 @	47
cyanide "		28 @	30
iodide "		2 15 @	2 20
Quicksilver		59 @	60
Rochelle salts		— @	17½
Salicine, bulk		2 50 @	2 55
Salol, bulk		3 00 @	3 20
1 lb. bots.		3 10 @	3 50
½ lb. bots.		3 15 @	3 50
¼ lb. bots.		3 25 @	3 65
ounces		25 @	30
Santonine		2 05 @	2 15
Seidlitz mixture		14 @	14½
Sesame oil	℔ gal.	60 @	70
Silver nitrate	℔ oz.	41 @	42½
Spermaceti, blocks	℔ lb.	26½@	27
cakes		27½@	28
Strontia, nitrate		7½@	8
St John's Bread		2¼@	2½
Sugar of milk, cob		15 @	16
powdered		10 @	12
Sulphur, roll		2 00 @	—
flour		2 20 @	2 25
Strychnine, bulk	℔ oz.	60 @	75
Tamarinds	℔ keg.	2 05 @	2 25
Thymol	℔ lb.	2 25 @	2 50
Vanillin	℔ oz.	1 50 @	1 65
Venice turpentine	℔ lb.	14 @	17
Zinc chloride, gran.		5 @	5½
sulphate		— @	2½

Balsams.

Copaiba—Central American		36 @	37
Para		41 @	43
Solidifiable		44 @	45
Fir Canada	℔ gal	1 90 @	2 00
Oregon		1 15 @	1 25
Gurjun	℔ lb.	10 @	15
Peru		1 90 @	1 95
Tolu		30 @	31

Barks.

Angostura	℔ lb	8 @15
Bayberry		3½@ 3½
Black Haw, of root, true		6½@ 7
of tree		4 @ 5
Buckthorn		4½@ 5½
Cascara sagrada		6½@ 7½
Cascarilla		7½@ 8
Canella		5 @ 7
Cherry		4 @ 6
Cinchona—Red, quills		18 @22
broken		12 @15
Yellow, quills		— @20
broken		13 @15
Condorango		10 @12
Coto		12 @15
Cramp		5 @ 6
Dogwood, Jamaica		5½@ 6½
Elm, common		8 @ 9
select		10½@11
Mezereon		8 @10
Oak, red		3 @ 4
White		3 @

Orange peel—bitter, Curacoa, quarters.		8 @ 8½
sweet, Malaga, pieces		7 @ 8
quarters.		9½@10
sweet, Trieste		— @ 5½
Prickly ash		13 @15
Pomegranate of fruit		9 @11
of root		12 @13
Quebracho		10 @10½
Sassafrass		6 @ 8
Simaruba		10 @12
Soap, white		3½@ 5½
crushed		5½@ 7
Wahoo, of root		16 @20
of tree		7 @10
White Pine		— @ 4
White Poplar		3½@ 4
Wild Cherry		4 @ 6
Witch Hazel		3 @ 4

Beans.

Calabar	℔ lb.	8 @	12
St. Ignatius		15 @	20
Tonca—Angostura		75 @	85
Para		12 @	15
Surinam		45 @	50
Vanilla—Mexican, whole		12 00 @16 00	
cuts		9 00 @ 9 50	
Bourbon, whole		5 00 @ 9 00	
Tahiti, whole		2 40 @ 2 50	

Berries.

Cubeb	℔ lb.	6 @	8
Fish (Coculus Indicus)		3 @	3½
Juniper		2½@	2¾
Laurel		4 @	5
Prickly ash		10 @	15
Saw Palmetto		— @	6

Essential Oils.

Almond—bitter	℔ lb.	4 00 @	6 00
artificial		75 @	1 00
Amber—crude		13 @	15
rectified		22 @	23
Anise		1 42½@	1 45
Bay		2 50 @	3 00
Bergamot		1 90 @	2 15
Birch, sweet		1 15 @	1 20
Birch Tar, crude		15 @	18
extra		25 @	30
Cade		15 @	25
Cajeput		52½@	57½
Camphor		5¾@	6½
Caraway seed		1 00 @	1 15
Cassia		80 @	1 05
Cedar leaf		35 @	40
wood		— @	25
Cinnamon, Ceylon, heavy		3 00 @	9 00
Citronella		23 @	24
Cloves		55 @	57½
Copaiba		80 @	—
Coriander		7 25 @	11 00
Crotch		1 00 @	1 10
Cubeb		70 @	75
Cummin		3 00 @	—
Erigeron		70 @	75
Eucalyptus, American		45 @	60
Australian		70 @	75
Fennel seed		— @	1 25
Geranium rose, African		5 50 @	6 50
Turkish		2 25 @	2 50
French		— @	11 00
Ginger		— @	4 50
Gingergrass		1 00 @	1 10
Hemlock		33 @	35
Juniper berries—rectified		— @	1 00
twice rectified		— @	1 20
wood		25 @	30
Lavender, cultivated		1 90 @	2 00
flowers		1 20 @	1 60
aspic, pure		— @	1 00
spike		75 @	90
garden		35 @	55
Lemon		75 @	90
Lemongrass, native		— @	1 20
Linaloe		1 40 @	1 50
Mace		— @	1 15
Malefern		1 50 @	1 75
Mustard—natural		5 00 @	6 00
artificial		2 50 @	3 75
Neroli—petale		— @	25 00
bigarade		20 00 @	24 00
Nutmeg		1 25 @	—
Orange, bitter		2 85 @	3 00
sweet		1 60 @	1 80
Origanum		21 @	23
Patchouly—leaf		— @	5 00
cultivated		— @	6 00
Peppermint—tins		75 @	85
bottles		1 05 @	1 10
Pennyroyal		95 @	1 05
Petit grains, French		4 00 @	4 25
American		1 70 @	1 75
Pimento		3 00 @	3 25
Rhodium		2 00 @	7 00
Rose	℔ oz.	4 75 @	5 50
Rosemary flowers, French	℔ lb.	75 @	1 10
Trieste		— @	50
Sandalwood—East India		3 25 @	3 75
West India		1 75 @	2 00
Australian		— @	3 25
Sassafras—natural		32 @	35
artificial		28 @	30
Saffrol		38 @	40
Savin		80 @	1 30
Spearmint		85 @	95
Spruce		26 @	30
Tansy		85 @	90
Thyme—red, French		80 @	90
white, French		1 00 @	1 20
Wintergreen—natural		1 15 @	1 25
artificial		47½@	50
Wormseed—Baltimore		2 00 @	—
Wormwood, pure		3 75 @	4 25
Ylang ylang		48 00 @	72 00

Flowers.

Arnica	6½@	7½
Calendula, foreign	— @	45
Chamomile, Belgian	16 @	18
German	23 @	30
Insect	15 @	30
Lavender, ordinary	3 @	5
select	6½@	10
Poppy, red	— @	35
Rosemary	15 @	18
Saffron, American	9½@	10½
Alicante	4 90 @	5 25
Valencia	10 75 @	11 50

Gums.

Aloes, Curacao, in gourds	℔ lb.	4½@	5
Cape		5½@	6
Curacao		3 @	3½
Socotrine		20 @	24
Ammoniac		20 @	—
Arabics, Firsts		53 @	56
Seconds		33 @	36
Thirds		27 @	28
Fourths		22 @	24
Siftings		— @	15
Sorts		16½@	17½
Asafoetida		18 @	22
Benzoin		25 @	30
Camphor, American, bbls.		45½@	46
cases		46 @	46½
ounces		46½@	47
Japan		46 @	48
Chicle		26 @	28
Euphorbium		15 @	—
Galbanum		70 @	75
Gamboge		31 @	36
Guaiac		11 @	15
Kino		1 90 @	2 00
Mastic		41 @	44
Myrrh		15½@	23
Olibanum, siftings		4 @	4½
sorts		5½@	—
tears		8½@	9
Sandarac		16 @	20
Scammony, resin		— @	2 25
Aleppo		2 75 @	2 90
Virgin		4 00 @	6 50
Senegal, picked		18 @	24
sorts		— @	13
Tragacanth, Aleppo, Firsts		— @	65
Seconds		45 @	52
Thirds		35 @	40
Fourths		27 @	32
Turkey, Firsts		65 @	85
Seconds		50 @	60
Thirds		45 @	50

Herbs and Leaves.

Aconite	℔ lb.	8 @	10
Althea		— @	10
Belladonna		11 @	12
Buchu, short		13 @	15
long		16 @	18
Cannabis Indica		13½@	15½
Coca, Huanoco		22 @	25
Truxillo		20 @	22
Coltsfoot		8 @	—
Conium		— @	7
Deer Tongue		4 @	6
Damiana		7 @	8
Digitalis		10½@	11
Doggrass		6½@	7½
Eucalyptus		4 @	—
Grindelia robusta		6 @	6½
Henbane (hyosciamus)		10½@	12
Horehound		— @	5
Jaborandi		8 @	10
Laurel		3½@	3¾
Lobelia		— @	5½
Matico		9 @	10
Marjoram, German		17 @	18
French		8½@	10
Pennyroyal		— @	8½
Peppermint, American		— @	7
German		— @	25
Pichi, tops		15 @	20
Pulsatilla		20 @	22
Prince's pine		— @	8
Rose, red		90 @	1 00
pale		11 @	12
Rosemary		— @	4
Rue		13 @	16
Sage, Italian picked		3 @	3½
Savory		5 @	5½
Scullcap		9 @	11
Squaw Vine		7 @	8
Senna, Alex, whole leaf		24 @	26
half leaf		12 @	14
siftings		6¼@	7½
Tinnevelly		7 @	14
Stramonium		7 @	8
Thyme		3½@	4
Uva Ursi		4 @	4¼
Witch Hazel		3½@	4
Wormwood, foreign		5½@	7
Yerba Santa		5 @	6

Roots.

Aconite, German	℔ lb.	11½@	12½
Alkanet		5¾@	6½
Althea, whole		12½@	13
cut		15 @	17
Angelica, German		14 @	15
American		7 @	8
Arnica		14 @	16
Belladonna, Atropia		10 @	12
Scopalia		9 @	10
Berberis Aquifolium		9 @	10
Bitter		— @	11
Blood		6½@	7½
Blueflag		7 @	9
Byronia		8 @	9
Burdock		7 @	8
Calamus, bleached		28 @	30
unbleached		7 @	8
Cohosh, black		3½@	4½
blue		— @	5
Colchicum		8 @	9
Colombo		7 @	9
Culvers		10 @	12
Dandelion, German		8¾@	9½
Elecampane		4 @	4½
Galangal		6 @	7
Gelsemium		5½@	6½
Gentian		3¾@	4½
Ginseng, Southern		2 70 @	3 25
Northern		4 25 @	4 50
Northwestern		3 75 @	4 00
Ginger, Jamaica, unbleached		11½@	17
bleached		17 @	19
Golden seal		60 @	75
Hellebore, white		6 @	8
black		5 @	6
powdered		9 @	10
Hydrangea		— @	5
Ipecac, Rio		3 75 @	4 25
Jalap		11 @	11½
Kava Kava		13 @	15
Lady Slipper		— @	18
Licorice, ordinary bale		3½@	4
selected bale		5 @	6

Lovage, American		— @	22
German		— @	9
Mandrake		3¾@	4½
Musk, Russian		— @	14
Orris, Florentine, bold		8 @	9
small		6½@	7½
Verona		5 @	7
fingers		60 @	65
Pareira brava		7½@	10
Pellitory		15 @	16
Pink		19¼@	20
Pleurisy		9 @	10
Poke		3½@	4½
Rhatany		10 @	15
Rhubarb, Canton		25 @	40
Shensi		50 @	60
High dried		17½@	30
clippings		17 @	30
Sarsaparilla, Honduras		30 @	35
Mexican		10½@	11½
Senega, Southern		27 @	28
Western		25 @	26
Skunk Cabbage		7½@	8
Snake, Canada		22 @	25
Texas		28 @	30
Virginia		35 @	38
Stillingia		4½@	5
Stone		4 @	5
Squills		3¾@	4
Unicorn, false		20 @	23
true		— @	22
Valerian, German		12 @	14
Belgian		10 @	12
English		12 @	20
Wild Yam		5½@	6
Yellow Dock,		— @	4½
Zedoary		9 @	10

Seeds.

Anise, Italian, sifted	℔ lb.	7 @	7½
Russian		4¼@	4½
star		23 @	24
Canary, Sicily		2¾@	2½
Smyrna		2¼@	2½
Caraway, Dutch		5½@	5¾
Cardamoms, Bleached		65 @1	05
Decorticated		75 @	85
Celery		6½@	6½
Colchicum, German		16 @	17
Conium		6 @	7
Coriander, natural		2½@	2¾
bleached		2½@	3
Cummin, Malta		6½@	7
Fennel, German		— @	10
Italian		4½@	5
Flax	℔ bbl.	5.25 @	5 50
ground	℔ lb.	3 @	3½
Foenugreek		— @	3
Guinea grains		14 @	16
Hemp, Russian		3½@	3¾
Larkspur		30 @	33
Lobella		17 @	20
Millet		1½@	1½
Mustard, brown, Bari		@	—
Cal.		5½@	5½
Sicily		5½@	5½
Trieste		8 @	—
yellow, Cal.		4½@	4½
English		5 @	5½
German		3½@	4
Poppy, blue		7¾@	8
Quince, German		40 @	45
Rape, English		— @	4
German		4½@	4¾
domestic		2½@	2¾
Sabadilla		10 @	12
Sevadilla		— @	15
Stramonium		— @	8
Strophanthus		80 @	90
Sunflower		3 @	3½
Worm, Levant		8 @	8½
American		5 @	7

Shellac.

D. C.	℔ lb.	26 @	28
V. S. O.		24 @	—
Triangle G.		23 @	—
S. S.		20 @	21
S. D.		21 @	23
T. N.		14½@	16½
Garnet, A. C.		15 @	16
Button		20 @	25
Bleached		16 @	17

Spices.

Cassia, Batavia, No. 1	℔ lb.	17 @	17½
broken		11½@	14
Canton, matted rolls		8 @	8½
broken		5½@	5¾
Saigon, rolls		45 @	46
broken		35 @	38
Buds		25 @	26
Cloves, Amboyna		10½@	10¾
Zanzibar		7¼@	7½
stems		2½@	2¾
Ginger, African		4¾@	4¾
Calcutta		4½@	4¾
Cochin, A B C		5¼@	5¾
D		4¼@	5
Mace Banda		39 @	41
Batavia		28½@	34
Penang		38 @	41
Nutmegs, 110's		27½@	28¼
Pepper, black, Acheen		9¾@	10
Singapore		11¼@	11¾
West Coast Sumatra		10¼@	10½
white, Penang		16 @	16¼
Singapore		17¾@	18
red, capsicums		8¾@	9
Zanzibar		10½@	10¾
Pimento, Jamaica, prime		8¼@	8½

Chemicals.

Heavy Chemicals.

Alkali, 48 ℔ cent., Solvay,	℔ 100 lbs.	1 90 @	1 95
ammonia, high test		70 @	85
Bleach, over 35 ℔ cent.		1 25 @	1 45
Salt cake		60 @	65
Soda ash, carb., 48 per cent.		90 @	95
high test		75 @	80
caustic, 48 per cent.		1 50 @	1 60
Newcastle, 48 per cent.		— @	—
high test		— @	—
Soda, bicarb., English		1 50 @	2 00
American		1 15 @	2 50
crystal carbonate		1 60 @	1 75

Caustic solvay 60 % cent., % 100 lbs.	1 80	@	1 90
70 " "	1 45	@	1 55
74 " "	1 50	@	1 65
foreign caustic, 60 % cent...	1 75	@	2 00
70 " " ...	1 60	@	1 70
74 " " ...	1 65	@	1 75
76 " " ...	1 70	@	1 80
Sal, English	62½	@	65
American	60	@	65

Acids.

Acid acetic....% 100 lbs.	1½	@	1¾
chemically pure....% lb.	20	@	21
oxalic	6¼	@	6½
pyroligneous	9	@	12
sulphuric, 60 deg..% 100 lbs	90	@	1 20
66 deg.	1 20	@	1 75
bulk, 50 deg.	12 00	@	12 50
muriatic, 18 deg.	1 20	@	1 25
20 deg.	1 35	@	1 85
22 deg.	1 30	@	2 25
aqua fortis, 36 deg....% lb	3½	@	4½
38 deg.	3¾	@	4¾
40 deg.	4½	@	4¾
42 deg.	4½	@	4¾
nitric, 36 deg.	3¾	@	4¾
38 deg.	4¼	@	4¾
40 deg.	4¾	@	4¾
42 deg.	4¾	@	5¼
tartaric, crystals	31½	@	32
powdered	32	@	32½

Miscellaneous Chemicals.

Acetate of lime, gray..% 100 lbs.	1 25	@	1 30
brown.	80	@	85
Alum, lump	1 65	@	1 75
ground	1 75	@	1 85
porous	1 75	@	2 00
Argols, plates....% lb.	22½	@	—
red	2¼	@	2½
Arsenic, white	4¼	@	4¾
red	7¾	@	8½
Brimstone, crude, 2ds....% ton.	20 75	@	22 00
3ds	18 75	@	21 00
Cream tartar, crystals, p. c.% lb.	22¾	@	23
powdered, 99 p. c.	23½	@	24
Chloride of calcium	95	@	1 00
Copperas	62½	@	70
Glauber salts	65	@	85
Nitrate of lead	6¾	@	7
soda.	1 62½	@	1 65
Chlorate of soda	10	@	10½
Sugar of lead, brown	5¼	@	5½
white	7½	@	7¾
Saltpeter, crude	3½	@	3¾
refined	4	@	5¼
Sulphate alumina	1½	@	1½
Vitriol, blue	5½	@	6

Ammoniates, Potashes' Etc.

Ashes, pot, 1st sorts....% lb.	3½	@	3¾
pearl	5	@	5¼
Potash, chlorate	9¾	@	9½
powdered	9¾	@	10½
carb	2¾	@	4½
caustic	4½	@	5½
dbl m'ure salt 48@53 %c.	1 02	@	1 05½
dbl m'ure salt 48@53 %c. less than 25 tons..	25 00	@	32 00
sulph. of basis 90@98%c.	1 97½	@	2 03½
90@98 % cent less than 25 tons..	39 00	@	41 00
Kainit, 25 % cent. S. of P..% ton	8 70	@	10 15
less than 25 tons.	9 75	@	13 00
Sylvinit, 35@37 % ct. P...% unit.	36½	@	39
Aq. am'ia (in cbys) 16 deg..% lb.	3	@	3½
18 deg.	3½	@	3¾
20 deg.	4	@	4¼
26 deg.	6	@	6¼
Ammoniac, sal, gray	5¼	@	5⅝
granulated	5⅝	@	—
lump	8¼	@	8½
Ammonia, sulphate	3 15	@	3 20
Potash, muriate ....% 100 lbs.	1 78	@	1 84
less than 25 tons..	38 00	@	42 00

Ammoniates, Etc.:

Blood, dried, red, per unit	1 95	@	2 00
low grade	1 85	@	1 90
Concentrated tankage	1 80	@	1 85
Bones, rough....% ton.	20 00	@	21 00
ground	21 50	@	23 00
Bone meal	23 00	@	26 00
Bone black, refuse	18 50	@	19 50
Fish guano, dried	19 50	@	20 00
acidulated	10 00	@	10 50
Phosphate rock, f. o. b. Char'n.	3 25	@	3 75
f. o. b. Peace River..	2 50	@	3 00
Land Pebble, 70 % cent...	3 00	@	3 25
Acid phosphate, 15@18 % cent	60	@	65

Dyestuffs.

Acid, picric, best crystals..% lb.	23	@	26
tannic, commercial	32½	@	40
crystals	70	@	80
Acetate of soda	4	@	6
Albumen, egg	64	@	68
blood	15	@	16½
Alizarine	12	@	18
Aniline oil	9	@	10
salt, crystals	7¾	@	8½
Annatto	10	@	25
seed	—	@	5½
Antimony, oxymuriate	4	@	6
salt, 65 per cent.	16	@	17
47 per cent.	13½	@	15
tartar emetic	22½	@	30
Bichloride tin	8½	@	12
Bichromate of potash, Scotch	9½	@	9¾
American	9½	@	9¾
Bichromate of soda	7½	@	7¾
Bisulphite of soda	1½	@	2½
Carmine of Indigo	60	@	75
Cochineal, Teneriffe, silver	23	@	24
black	24	@	25
gray black	32	@	33
Cudbear, French	12	@	18
concentrated	23	@	25
English	10	@	18
Cutch, mat.	4	@	5
ordinary in boxes	4½	@	7
fine in boxes	7½	@	9
Dextrine, imported	5¾	@	6¼
domestic	5½	@	6
corn	2½	@	3
Divi Divi ....% ton.	45 00	@	50 00
Flavine ....% lb.	18	@	26
Fustic stick ....% ton.	11.00	@	18.00
Gambier ....% lb.	2.85	@	2¼
Cube, No. 1	4½	@	5
No. 2	3¾	@	4
Garancine	6	@	8
Hypo. of soda, cks....% 100 lbs.	1.65	@	1.85
kgs.	1.85	@	2.25
Indigo, Bengal, low grade..% lb.	62½	@	67½
medium	70	@	82½
high grade	85	@	1.25
Kurpahs, medium to good	55	@	65
higher grades..	67½	@	82½
Guatemalas	45	@	1.00
Manila	35	@	55
Madras	25	@	40
J (Synthetic)	—	@	38
Indigotine	95	@	1.80
Logwood stick....% ton.	17.00	@	22.00
Madder, Dutch ....% lb.	5	@	10
French	6	@	7½
Myrabolans	2	@	3
Muriate of tin	6	@	10
Nitrate of iron, commercial	1¼	@	1¾
true	4	@	4½
Nutgalls, blue Aleppo	15½	@	16½
Chinese	15	@	15½
Persian berries	7	@	8
Prussiate of potash, yellow	19	@	19½
red	37	@	40
Prussiate of soda	16½	@	17
Phosphate of soda	2¾	@	3½
Quercitron ....% ton.	—	@	28.00
Sago flour ....% lb.	3¾	@	4
Salts of tartar	6½	@	7
Silicate Soda	1	@	2
Soluble oil, 50 per cent.	7	@	8
75 per cent.	11	@	12
Starch corn, pearl, in bbls, % lb.	1 47	@	1 60
potato	4½	@	4¾
wheat	5	@	6
Stannate of soda, 50 soluble	—	@	13½
40 soluble	—	@	11¼
25 soluble	—	@	9¾
Sumac, Sicily, No. 1....% ton.	51.00	@	55.00
No. 2	48.00	@	52.50
Virginia	—	@	40.00
Tin crystals ....% lb.	20	@	21½
Tapioca flour	4¾	@	5
Vanadiate ammonium ....% oz.	—	@	60
Zinc Dust....% lb.	7¼	@	7½

Chipped Dyewoods, Etc.

Barwood ....% lb.	2	@	2¼
Camwood	6	@	8
Fustic, Jamaica	1¼	@	1½
Cuban	1½	@	—
Hypernic	3	@	3¼
Logwood, Campeche	1⅝	@	1¾
Red sanders	2¾	@	3
Turmeric, ground	6	@	7
powdered	7½	@	8

Extracts.

Archil, double ....% lb.	8	@	13
concentrated	14	@	18
Barberry, French	22	@	28
Chestnut	2¼	@	4½
oak	2¾	@	3¼
Hemlock	2½	@	4½
Fustic, solid	8½	@	10
liquid, 51 deg.	6	@	10
Gall	15	@	18
Indigo	6½	@	15
Logwood, solid	6½	@	12
liquid, 51 deg.	4½	@	10
42 deg.	4	@	7
Persian Berry	12	@	15
Sumac	3	@	6

Comparative Prices.

On June 19, 1896, 1897 and 1898.

Chemicals.	1896.	1897.	1898.
Bleaching powder	1 50	1 45	1 60
Brimstone, 3ds	21 50	18 50	15 75
Caustic soda, 70 p. c.	1 50	1 90	2½
Caustic soda, 60 p. c.	1 80	2 25	2 37½
Sal soda, Am.	55	57½	65
Soda ash, 48 p. c. carb.	75	90	1 10
Soda ash, 48 p.c.caustic	1 50	1 10	1 35
Soda alkali, 48 p. c.	75	85	90
Soda, nitrate	1 75	1 70	1 80
Cream tartar, crystals	24½	22½	26
Muriate of potash	1 78	1 78	1 78
Chlorate of potash	8¾	9	8
Kainit	8 80	8 80	8 80
Paints.			
White lead in oil	5½	5¼	5¼
Litharge, Am. pow'd	4¾	4¼	4¼
Paris green	14½	11½	12½
Orange mineral	6¾	6¼	6¼
Ven. red, English	1 50	1 50	1 50
Ven red, American	60	60	60
Barytes	$12 00	$14 00	$14 00
Whiting, commercial	35	35	40
Drugs.			
Opium	3 55	2 20	1 95
Morphine, domestic	2 25	1 50	1 85
Quinine	20	15	26½
Alcohol	2 32	2 29	2 31
Borax, city	7	5¼	5¾
Beans, tonca (Ang.)	1 55	1 65	2 10
Cubeb, XX.	6	6	7
Cuttlefish	7½	8	8¼
Glycerine, C. P. drums.	12½	12	16¾
Oil, castor, city	12	12	9¼
Oil, codliver, Nor.	24 00	22 00	53 00
Oil, cassia	95	1 30	1 50
Oil, peppermint, tins	85	1 10	1 50
Oil, sassafras	31	35	40
Quicksilver	57	53	50
Asafoetida	15	14	13
Gum, arabic, sorts	17	19	21
Camphor, bbls	34½	39	40
Shellac, D. C.	25	27	29
Senna, Alex. Nat'l	15	15	16
Senega root	30	35	38
Ipecac	2 25	1 65	1 35
Jalap	10	9½	10
Canary seed, Smyrna	2¼	1¾	1⅞
Caraway seed, Dutch	5	4¾	5¼
Mustard seed, Cal. yel.	5¾	2¾	2¼
Rapeseed, German	3⅜	2½	2¼
Oils.			
Cottonseed, prime, S. Y.	25	23¾	25
Olive, Sicily	50	49	48
Cocoanut, Ceylon	5¾	5	5½
Lard, prime city	50	32	43
Linseed, domestic	44	29	38
Menhaden, prime crude	23	20	20
Whale, bl'ch'd winter	53	46	40
Sperm, bl'ch'd winter	70	48	49
Oil cake, Western	23 50	18 00	16 75
Spirits turpentine	27¼	27½	26½
Dyestuffs.			
Bichromate, potash Am.	9¾	10	10
Cochineal, Teneriffe S.	25½	26	28
Cutch, bag	3¼	5	4½
Gambier	2 75	2 70	3 60
Indigo, Bengal, h gde	90	1 00	1 10
Prussiate potash, yellow	15¾	13½	16
Sumac, Sicily, prime	44 00	37 00	46 00
Starch, corn	1 55	1 12½	2 25

IMPORTS ENTERED IN NEW YORK FOR CONSUMPTION.

Week Ending June 16.

ACID, ACETIC—170 cbys, 11,243 lbs, McKesson & Robbins, Br Trader, Antwerp

BENZOIC—70 cs, 7,000 lbs, Pickhardt & K, Friesland, Antwerp

CARBOLIC—25 cks, Schoellkopf, H & M, Tauric, Liverpool
60 dms, Merck & Co, Br Trader, Antwerp
25 cks, Schoellkopf, H & M, Marquette, London

PHTALIC—9 bbls, 3,306 lbs, Heller & Merz Co, Friesland, Antwerp

PICRIC—50 pkgs, Schoellkopf, H & M, Tauric, Liverpool

SAL—10 cs, 2,204 lbs, Dodge & Olcott, Bulgaria, Hamburg

ALIZARINE—55 pkgs, Farb of Elberfeld Co, Friesland, Antwerp
25 cks, Pickhardt & K, Friesland, Antwerp
118 cks, Pickhardt & K, Rotterdam, R'dam
26 cks, V Koechl & Co, Rotterdam, R'dam

BLACK—46 cks, 20,332 lbs, Pickhardt & K, Friesland, Antwerp

BLUE—45 cks, 17,359 lbs, Pickhardt & K, Friesland, Antwerp

BROWN—40 cks, 16,800 lbs, Pickhardt & K, Friesland, Antwerp

AMMONIA, MURI—30 cks, A Klipstein & Co, Friesland, Antwerp
15 cks, J L & D S Riker, Tauric, L'pool

SAL—10 cks, 6,715 lbs, B P Ducas Co, Pr Regent L, Bremen

ANILINE COLORS—2 pkgs, W J Matheson & Co, Europe, London
4 cks, F Bredt & Co, Prins R Luitpold, Bremen
10 cks, V Koechl & Co, Prins R Luitpold, Bremen
10 cks, C Bischoff & Co, Prins R Luitpold, Bremen
11 cks, Geisenheimer & Co, Prins R Luitpold, Bremen
60 cks, A Klipstein & Co, Friesland, Ant
3 cks, Geisenheimer & Co, Friesland, Ant
16 pkgs, R F Downing & Co, Friesland, Antwerp
25 pkgs, F Bredt & Co, Friesland, Ant
13 kgs, Sykes & Street, Friesland, Ant
5 kgs, O Hann & Bro, Friesland, Antwerp
9 cks, J Campbell & Co, Friesland, Antwerp
1 kg, Hoey Gascogne & Co, Friesland, Ant
203 pkgs, Farb of Elberfeld Co, Friesland, Antwerp
72 cks, Pickhardt & K, Friesland, Antwerp
12 pkgs, J J Keller & Co, Friesland, Ant
20 cks, Sykes & Street, La Champagne, Havre
92 cks, Pickhardt & K, Rotterdam, R'dam
135 cks, V Koechl & Co, Rotterdam, R'dam
56 cks, C Georgi, Rotterdam, Rotterdam
188 cks, W J Matheson & Co, Amsterdam, Rotterdam
58 cks, V Koechl & Co, Amsterdam, R'dam
89 cks, Sykes & Street, La Touraine, Havre
53 cks, Berlin Aniline Works, Palatia, Hamburg

OIL—14 dms, 13,068 lbs, W J Matheson & Co, Europe, London
9 dms, 10,750 lbs, Pickhardt & K, Friesland, Antwerp
7 dms, J A & W Bird & Co, Martello, Hull
14 dms, 14,066 lbs, W J Matheson & Co, Marquette, London

SALT—45 cks, 25,735 lbs, V Koechl & Co, Friesland, Antwerp
53 cks, B P Ducas Co, Friesland, Antwerp
70 cks, Pickhardt & K, Rotterdam, R'dam

ANTIMONY, REG—68 cks, Am Metal Co, St Paul, Southampton
71 cks, Am Metal Co, St Louis, S'h'ton

ARECA NUTS—4 bgs, Peek & Velsor, St Paul, Southampton

ANISEED—8 cs, McKesson & Robbins, St Paul, Southampton

ARGOLS—55 bgs, 8,170 lbs, C Pfizer & Co, Peninsular, Lisbon
193 bgs, 44,034 lbs, C Pfizer & Co, California, Leghorn
86 bgs, 23,896 lbs, Tartar Chemical Co, Citta di Palermo, Messina
35 cks, 56,151 lbs, Tartar Chemical Co, Acacia, Messina
250 bgs, 55,115 lbs, Tartar Chemical Co, R F Matthews, Messina
52 cks, Tartar Chemical Co, Spartan Prince, Messina
60 cks, Tartar Chemical Co, Dona Maria, Oporto

BALSAM, TOLU—70 cs, 6,822 lbs, H W Peabody & Co, Altai, Savanilla

BARIUM, BINOXIDE—13 cks, A Penchot, Edam, Rotterdam
12 cks, Oakland Chem Co, Edam, R'dam

BARYTES—22 cks, Gabriel & Schall, Rotterdam, Rotterdam
55 cks, Gabriel & Schall, Rotterdam, R'dam

BAY RUM—20 bbls, 938 gls, Tyler & Finch Co, Madiana, St Kitts

BERLIN BLUE—10 cks, 2,205 lbs, H Kohnstamm & Co, Rotterdam, Rotterdam

BETA NAPTHOL—34 cs, V Koechl & Co, Rotterdam, Rotterdam

BENZOLNITRO—6 dms, N Y & B Dyewood Co, Palatia, Hamburg

BISMUTH—12 cs, 2,257 lbs, McKesson & Robbins, Europe, London
6 pkgs, McKesson & Robbins, St Paul, Southampton
8 cs, C Pfizer & Co, St Louis, S'h'ton

BLANC FIXE—20 cks, 9,979 lbs, Pickhardt & K, Palatia, Hamburg
20 cks, 23,104 lbs, Toch Bros, Palatia, H'b'g

BLEACH—37 cks, A Klipstein & Co, Friesland, Antwerp
138 cks, Fuerst Bros & Co, Friesland, Ant
75 cks, T A Reichard, Friesland, Antwerp
109 cks, J L & D S Riker, Tauric, L'pool

BLUE—10 bbls, A de Ronde & Co, Friesland, Antwerp

BONES—1,920 bgs, Flint, Eddy & Co, City of Washington, Tampico
375 bgs, H H Pike, Santiago, Cienfuegos
121 bgs, D A de Lima & Co, Curacoa, Curacoa

BONE BLACK—10 cks, Binney & Smith, Amsterdam, Rotterdam

BRISTLES—4 cks, 969 lbs, Polack & Goldstein, St Paul, Southampton
17 pkgs, 3,567 lbs, F W Von Stade, La Champagne, Havre
6 cks, H Kroehl, Bulgaria, Hamburg
1 cs, Rump & Cattus, Pr Regent Luitpold, Bremen
14 cks, 7,205 lbs, H Kroehl, Colorado, Hull
6 cks, 3,615 lbs, H Kroehl, Palatia, H'b'g
5 cks, 689 lbs, Wells, Fargo & Co, St Louis, Southampton
13 cs, 1,300 lbs, H Kroehl Pr Regent Luitpold, Bremen

BRONZE POWDER—9 cs, 2,449 lbs, Gerstendorfer Bros, Pr Regent Luitpold, Bremen
5 cs, 1,910 lbs, J Marsching & Co, Pr Regent Luitpold, Bremen
1 cs, 50 lbs, G Benda, Pr Regent Luitpold, Bremen
4 cs, 1,400 lbs, B Uhlfelder, Pr Regent Luitpold, Bremen
6 cs, 1,133 lbs, S Rosenhaupt, Pr Regent Luitpold, Bremen
9 cs, 2,995 lbs, T Reissner, Bremen, Bremen
1 cs, 36 lbs, C Helmuth, Rotterdam, R'dam
11 cs, Baer Bros, Pr R Luitpold, Bremen
9 cs, W H Kemp, Pr R Luitpold, Bremen
7 cs, B Meiners, Lahn, Bremen

CAFFEINE—3 cs, E Levi, Europe, London.

CANARY SEED—239 bgs, C Rosenstein & Co, Stalheim, Smyrna.
300 bgs, G W Sheldon & Co, Etruria, Liverpool.

CARAWAY SEED—200 bgs, H Nordlinger & Co, Rotterdam, Rotterdam.
5 bls, Rosenstein Bros, Edam, Rotterdam.

CARDAMOMS—1 bg, McKesson & Robbins, St Paul, Southampton.
10 cs, Schieffelin & Co, St Louis, S'thamp'n

CASSIA—84 bls, F H Leggett & Co, Rotterdam, Rotterdam.
40 bls, J Kissock & Co, Edam, Rotterdam.

CHALK—228 tons, Hammill & Gillespie, Polacstjernen, Copenhagen.
200 tons, J W Masters & Co, Europe, London.
335 tons, J W Masters & Co, Marquette, London.
2,300 tons, J F Whitney & Co, Glencairn, Dunkirk.

PRECIP—20 cks, 14,293 lbs, Parke, Davis & Co, Marquette, London.

CHAMOMILES—20 bls, Stallman & Fulton, Friesland, Antwerp.

CHEMICALS—39 pkgs, Merck & Co, Rotterdam, Rotterdam.
154 pkgs, Scherring & Glatz, Palatia, Hamburg.

COMPOUND—55 cs, E Levi, Rotterdam, Rotterdam.
2 cs, Fries Bros, La Champagne, Havre.
1 cs, Dodge & Olcott, La Champagne, Havre.
11 cs, E Levi, Pr Regent Luitpold, Bremen.
7 cs, E Levi, Lahn, Bremen.
1 cs, Lehn & Fink, Campania, Liverpool.

PREP—3 cs, V Koechl & Co, Rotterdam, Rotterdam.
25 cks, Roessler & H Chem Co, Rotterdam, Rotterdam.
60 pkgs, V Koechl & Co, Edam, Rotterdam.
2 cks, V Koechl & Co, Amsterdam, Rotterdam.
10 pkgs, Berlin Aniline Works, Palatia, Hamburg.
4 cks, S Ascher, St Louis, Southampton.
8 dmj, 19 pkgs, Lehn & Fink, Palatia, Hamburg.

SALT—26 cks, A Klipstein & Co, Friesland, Antwerp.
31 cks, V Koechl & Co, Friesland, Antwerp.
20 cs, Merck & Co, St Paul, Southampton.
18 cs, Scott & Bowne, St Paul, Southamp'n.
86 cks, Roessler & H Chem Co, Rotterdam, Rotterdam.
22 cks, Pickhardt & Co, Edam, Rotterdam.
1 cs, Schieffelin & Co, Palatia, Hamburg
44 cks, A Klipstein & Co, Palatia, Hamb'g.
25 cs, Lehn & Fink, St Louis, Southamp'n.
1 cs, Lehn & Fink, Palatia, Hamburg.

CHILLIES—357 bls, 46,151 lbs, F H Leggett & Co, Europe, London.

CHINA CLAY—200 cks, 100 tons, Hammill & Gillespie, Cuflc, Liverpool.
200 cks, 100 tons, J L Smith & Co, Cuflc, Liverpool.

CHLORINE GAS—25 dms, 2,844 lbs, Pickhardt & K, Edam, Rotterdam.

CHROME, GREEN—5 cs, 1,000 lbs, Pickhardt & K, Friesland, Antwerp.

YELLOW—1 ck, Pickhardt & K, Friesland, Antwerp.
5 ck, C Helmuth, Rotterdam, Rotterdam.
1 ck, Binney & Smith, Tauric, Liverpool.
2 cks, B Meiners, Lahn, Bremen.

CINCHONIDIA—33 cs, 12,900 ozs, E Levi, Edam, Rotterdam.

CINNAMON—5 bgs, R F Downing & Co, St Paul, Southampton.

CLOVES—4 cs, J Kissock & Co, St Louis, Southampton.

COAL TAR PREP—8 cks, C Georgi, Rotterdam, Rotterdam.
10 cks, V Koechl & Co, Amsterdam, Rotterdam.
18 cs, Berlin Aniline Works, Palatia, Hamburg.

PROD—2 cs, G Gennert, Aug Victoria, Hamburg.

COBALT, OXIDE—44 cs, 4,400 lbs, Roessler & H Chem & Co, Lahn, Bremen.
4 cs, Roessler & H Chem Co, Edam, Rotterdam.

COCOA BUTTER—12 cs, R F Downing & Co, St Paul, Southampton.
15 cs, Apgar & Co, Rotterdam, Rotterdam.

COLCOTHAR—17 cks, Hemingway & Co, Marquette, London

COLOMBO ROOT—54 bls, Peck & Velsor, St Paul, Southampton.

COLORS—1 cs, Fritzsche Bros, Pr Regent Luitpold, Bremen.
14 cs, 4 cks, Pickhardt & K, Friesland, Antwerp.
1 cs, G A & E Meyer, Friesland, Antwerp.
3 cs, G A & E Meyer, St Paul, Southamp'n.
10 cks, A B Ansbacher & Co, Rotterdam, Rotterdam.
10 cks, Rooney & Spence, Europe, London.
2 cs, J Marsching & Co, Teutonic, Liverp'l.
4 cs, Roessler & H Chem Co, Edam, Rotterdam.
20 pkgs, A Keppelmann, Palatia, Hamburg.
31 pkgs, Pickhardt & K, Palatia, Hamburg.
3 cks, Pomeroy & Fischer, Marquette, London.
2 cs, J M Huber, Palatia, Hamburg.
8 cs, J A Munkett, St Louis, Southampton.

CORKWOOD—1,360 bdls, Armstrong Cork Co, Peninsular, Lisbon.

A. Klipstein & Company

122 Pearl Street, NEW YORK

CHEMICALS AND DYESTUFFS

AGENTS FOR

ANILINE COLORS

Made by the Society of Chemical Industry BASLE.

SAL AMMONIAC

BRANCH HOUSES:

BOSTON, 286-295 Congress St. PHILADELPHIA, 50-52 N. Front St. CHICAGO, 126 Kinzie St.
PROVIDENCE, R. I., 13 Mathewson St. CINCINNATI, 215 Walnut St.
HAMILTON, ONT., Catharine St. MONTREAL 917 Lemoine St.

80 bdls, Lawrence, Johnson & Co, St Louis, Southampton.
CREOSOTE—100 cks, Schoellkopf & Horn, Tauric, Liverpool
250 bbls, Barrett Mfg Co, Martello, Hull.
500 cks, 25,000 gals, Barrett Mfg Co, Marquette, London.
CROCUS—25 kgs, R J Waddell & Co, Martello, Hull.
CUDBEAR—5 cks, N Y & B Dyewood Co, Marquette, London.
DEGRAS—1 bbl, 254 lbs, Perin & Co, Pennsylvania, Hamburg
DEXTRINE—200 bgs, W Caldwell & Co, Anchoria, Glasgow
50 bgs, C Morningstar & Co, Norge, Stettin
DIVI DIVI—45 bgs, 5,570 lbs, J H Recknagel, Altai, Baranquilla
DRAGON'S BLOOD—1 cs, Schieffelin & Co, St Paul, Southampton
1 cs, Stallman & Fulton, St Paul, Shton
DRUGS—2 cs, Stallman & Fulton, St Paul, Southampton
23 bls, Bichels & Techow, Palatia, Hbg
46 bls, J L Hopkins & Co, Palatia, Hbg
23 bls, R Hilliers' Son Co, Br Trader, Ant
DUTCH METAL CLIP'S—9 cs, Isaacs, Vought & Co, Pr R Luitpold, Bremen
4 cs, Fuchs & Lang Mfg Co, Pr R Luitpold, Bremen
27 cs, R F Downing & Co, Pr R Luitpoid, Bremen
LEAF—1 cs, J Marsching & Co, Pr R Luitpold, Bremen
DYEWOOD EXT—2 bbls, A Klipstein & Co, Friesland, Antwerp
27 cks, Sykes & Street, La Champagne, Havre
GUM—46 bls, C Morningstar & Co, Kaiser Wm II, Genoa
1 cs, Schieffelin & Co, St Paul, Southampton
1 cs, Schieffelin & Co, Palatia, Hamburg
ALOES—94 cs, 10,300 lbs, D A De Lima & Co, Curacoa, Curacoa
BENJAMIN—21 cs, Tyler & Finch Co, St Louis, Southampton
BENZOIN—4 cs, Lehn & Fink, St Louis, Ston
COPAL—8 cs, Schoellkopf, H & M, St Louis, Southampton
42 cs, E Hill's Son, Marquette, London
KAURI—130 cs, A Mason, Marquette, London,
102 cs, 22,848 lbs, Reimers & Meyer, Europe, London
LAC—87 cs, Berry Bros, Marquette, London
SENEGAL—50 bgs, 11,023 lbs, Thurston & Braidich, Campania, L'pool
TRAG—67 cs, D E Green & Co, St Louis, S'h'ton
43 cs, 8,038 lbs, Thurston & Braidich, St Louis, S'h'ton
23 cs, Thurston & Braidich, Servia, S'h'ton
HEMP SEED—1,050 bgs, C Rosenstein & Co, Europe, London
400 bgs, Levy & Levis Co, American, London
HOREHOUND LEAVES—5 cs, Wood & Selick, Cufic, L'pool
INDIAN RED—40 kgs, R J Waddell & Co, Martello, Hull
21 cks, D F Tiemann & Co, Llandaff City, Bristol
22 cks, G A & E Meyer, Martello, Hull
INDIGO, REFINED—6 chts, Jaeck Bros Co, Europe, London
IRON OXIDE—58 cks, 11,681 lbs, J L Smith & Co, Llandaff City, Bristol
MICA—1 cs, A O Schoonmaker, Teutonic, Liverpool.
28 cs, C D Orth, St Louis, Southampton.
MOSS—1 bl, T T Grossmith, La Champagne, Havre.
NAPHTHALINE—20 cks, Schoellkopf, H & M, Bulgaria, Hamburg.
NAPHTYLAMINE—25 cks, V Koechl & Co, Rotterdam, Rotterdam.
NUX VOMICA—7 bgs, C Pfizer & Co, Europe, London.
800 bgs, Darragh & Small, W B Flint, Alleppy.
OCHRE—1 ck, Pickhardt & K, Friesland, Antwerp.
100 bgs, J L Smith & Co, Llandoff City, Bristol.
96 cks, 30 kgs, J L Smith & Co, Martello, Hull.
16 cks, 4,409 lbs, A B Ansbacher & Co, Rotterdam, Rotterdam.
OIL, ALMOND—4 cs, G Lueders & Co, Ems, Genoa.
ANISE—51 cs, Dodge & Olcott, Europe, London.
BAY—4 cs, H Michelson, Madiana, St Thos
CASSIA—5 cs, Fritzsche Bros, Pr Regent Luitpold, Bremen.
COCOANUT—483 hhds, 267,584 lbs, Darragh & Small, W B Flint, Colombo.
COD LIVER—90 bbls, 2,700 gals, Parke, Davis & Co, Norge, Christiana.
25 bbls, 750 gals, Schieffelin & Co, Colorado, Hull.
ESS'L—28 cs, G Lueders & Co, Ems, Genoa
2 cs, Schieffelin & Co, Pr R Luitpold, Bremen.
2 cs, T T Grossmith, La Champagne, Havre.
8 cs, C Rockhill, Manilla, Genoa.
25 cs, G W Sheldon & Co, Acacia, Messina.
10 cs, Tyler & Finch Co, Acacia, Messina
11 cs, A A Stilwell, Acacia, Messina.
FUSEL—14 c ks, Schoellkopf, H & M, Pembridge, Hamburg
14 cks, Maas & Waldstein, Pembridge, Hbg
7 cks, 6,088 lbs, C Cooper & Co, Norge, Stettin.
44 cks, Knauth, N & K, Pembridge, Hamburg.
JUNIPER—1 cs, Schieffelin & Co, Pr R Luitpold, Bremen
LAVANDER—29 cs, G Lueders & Co, Ems, Genoa.
LEMON—88 cs, Fritzsche Bros, Pr R Luitpold, Bremen.
25 pkgs, Crandall & Godley Co, Cilurnum, Messina.
50 cs, T S Todd & Co, Cilurnum, Messina.
10 cs, Lehn & Fink, Acacia, Messina.
MYRBANE—25 cs, 2,500 lbs, W J Matheson & Co, Europe, London.
10 dms, Rendrock Powder Co, Martello, Hull.
NEROLI—1 cs, G Lueders & Co, Ems, Genoa.
PHOSPHATE—3,000 bgs, 672,000 lbs, Heller, Hirsch & Co, Br Trader, Antwerp
PIMENTO—73 bgs, C Wessels & Bro, Athos, Kingston
168 bgs, A S Lascelles & Co, Athos, Kingston
20 bgs, Park, Son & Co, Athos, Kingston
10 bgs, Leaycraft & Co, Athos, Kingston
171 bgs, J W Wilson & Co, Athos, Kingston
2,200 bgs, J E Kerr & Co, Ardanrose, Kingston
PITCH, CANDLE—29 cks, Berry Bros, Rotterdam, Rotterdam
PLUMBAGO—377 bbls, Knauth, N & K, Angola, Calcutta
100 bgs, C B Richards, California, Genoa
POLISHING POWDER—12 kgs, R J Waddell & Co, Martello, Hull
POTASH—1,500 bgs, H J Baker & Bro, Bulgaria, Hamburg
1,500 bgs, P Weidinger & Son, Bulgaria, Hbg
CYANIDE—100 cs, 5 tons, Schoellkopf, H & M, Europe, London
MURI—500 bgs, 111,993 lbs, H H Salmon & Co, Palatia, Hamburg
1,000 bgs, 238,547 lbs, Battelle & Renwick, Palatia, Hamburg
PUMICE—20 bbls, C Cooper & Co, Acacia, Messina
25 bgs, P Larini, Acacia, Messina
1,034 pkgs, R J Waddell & Co, California, Messina
QUEBRACHO WOOD—3,248 pcs, N Y & B Dyewood Co, Luigia, Colastine
QUININE—94 cs, 47,000 oz, G W Sheldon & Co, Pr R Luitpold, Bremen
21 cs, 21,000 oz, E Levi, Rotterdam, R'dam
8 cs, 8,000 oz, Stallman & Fulton, R'dam S'h'ton
15 cs, 7,500 oz, Roessler & H Chem Co, Edam, R'dam
101 cs, 64,572 oz, Smith & Schipper, St Louis, S'h'ton
RED LEAD—10 cks, 10,264 lbs, J M Huber, Rotterdam, R'dam
RESORCIN—10 cks, V Koechl & Co, Rotterdam, R'dam
5 cks, V Koechl & Co, Amsterdam, R'dam
12 bls, Heller & Merz Co, Br Trader, Ant
SACCHARINE—1 cs, 55 lbs, H M Rau, Friesland, Ant
3 cs, 300 lbs, A Klipstein & Co, Palatia, H'b'g
SAFFRON—63 bls, Mexican Commission Co, Vigilancia, Tampico
SARSAPARILLA—18 bls, 4,470 lbs, J W Wilson & Co, City of Washington, Tampico
7 bls, 1,469 lbs, Eggers & Heinlein, Ardanrose, Kingston
SEED, LAC—86 bgs, Rogers & Pyatt, Marquette, London
SENNA—70 bls, A U Andrus & Co, St Louis, S'h'ton

Cream of Tartar Tartaric Acid

GUARANTEED 99—100 Per Cent. Pure.

TARTAR CHEMICAL COMPANY, 47 Cedar St. N. Y

25 cks, Sykes & Street, La Touraine,, Havre
ERGOT—51 bgs, Schoellkopf, H & M, Pennsylvania, Hamburg
10 bgs, Stallman & Fulton, St Paul, Shton
25 bgs, Stallman & Fulton, Palatia, Hbg
FORMALDEHYDE—25 demjs, Lehn & Fink, Br Trader, Antwerp
86 demjs, Kny, Scherer & Co, Br Trader, Antwerp
FULLERS EARTH—180 bgs, Harway Dyewood & Ext Mfg Co, Europe, London
1,450 bgs, 120 tons, Hammill & Gillespie, Marquette, London
FUSTIC—42 tons, J W Wilson & Co, M R Cuza, Monte Christi
205 tons, H Marquardt & Co, Vieneria, Progreso
GALLS—58 bgs, D E Green & Co, Campania, Liverpool
GELATINE—35 cs, J Pollitz, Rotterdam, Rdm
36 cs, P Puttmann, Rotterdam, Rotterdam
GINGER—27 bbls, 3,736 lbs, Park, Son & Co, Ardanrose, Jamaica
18 bbls, 2,550 lbs, Park, Son & Co, Athas, Black River
22 bbls, C. Wessels & Bro, Ardanrose, Jamaica
3 bbls, J W Wilson & Co, Athas, Jamaica
633 bgs, 60,727 lbs, L German & Co, Campania, Liverpool
GLASS—6 cs, T W Morris, Rotterdam, Rdm
25 cs, O G Hempstead & Co, Rotterdam, Rotterdam
16 cs, Semon, Bach & Co, Rotterdam, Rdm
25 cs, Knauth, N & K, Rotterdam, Rdm
PLATE—4 cs, J Kahn, Friesland, Antwerp
31 cs, Pittsburg Plate Glass Co, Friesland, Antwerp
19 cs, P Wiederer, Pr R Luitpold, Bremen
WINDOW—356 cs, Holbrook Bros, Friesland, Antwerp
261 cs, Heroy & M, Friesland, Antwerp
GLUE—117 pkgs, A E Reimann, Europe, Ldn
26 pkgs, A E Reimann, Teutonia, Liverpool
23 cks, 14,453 lbs, A Hodge & Co, St Louis, Southampton
GLYCERINE—18 cks, 19,182 lbs, F H Kalbfleisch & Co, Havana, Havana
200 bbls, 219,611 lbs, Wallace, Muller & Co, Manilla, Genoa
20 dms, 10,127 lbs, E S Kuh, Kaiser Wm II, Genoa
GREEN—2 cks, C F Zentgraf, Rotterdam, Rdm
28 cks, Hemingway & Co, Marquette, London
JALAP—5 bls, Graham, Hinkley & Co, Seneca, Vera Cruz
KAOLIN, 10 bls, J Farr, Madiana, Domenica
KOLA NUTS—2 bgs, C Wessels & Bro, Ardanrose, Kingston
LAMPBLACK—82 cks, 2 cs, J Wilkes & Co, Friesland, Ant
LEMON JUICE—22 cks, Weidman Silk Dyeing Co, Citta di Palermo, Messina
LICORICE, ROOT—11 bls, 2,231 lbs, Peek & Velsor, Bulgaria, H'b'g
80 bls, Argumbeau & Ramee, Peninsular, Lisbon
LIME CITRATE—61 cks, C Pfizer & Co, Citta di Palermo, Messina
LITHOFONE—100 cks, 33,069 lbs, Gabriel & Schall, Prins R Luitpold, Bremen
LOGWOOD—19 tons, J E Kerr & Co, Ardanrose, Jamaica
690,000 lbs, A Behrens & Co, South Cambria, Hayti
243,000 lbs, H Kainer & Co, South Cambria, Pt de Paix
LONDON PURPLE—394 bls, Hemingway & Co, Marquette, London
MAGNESIA, CARB—20 bbls, G A & E Meyer, Martello, Hull
MANGANESE, OXIDE—23 cks, Feusterer & R, State of Nebraska, Glasgow
SULPH—5 cks, Toch Bros, Bulgaria, H'b'g
MANNA—20 cs, 2,367 lbs, Stallman & Fulton, Citta di Palermo, Messina
MEDICAL, BARK—22 bls, F T Montell & Son, Antilla, Nassau
1 bl, Stallman & Fulton, St Paul, S'h'ton
5 bls, McKesson & Robbins, St Paul, S'h'ton
16 bls, Parke, Davis & Co, Palatia, H'b'g
FLOWERS—4 bls, Parke, Davis & Co, Palatia, H'b'g
LEAVES—15 bls, Parke, Davis & Co, Palatia, H'b'g
PREP—7 cs, Fritzsche Bros, Pr Regent Luitpold, Bremen
3 cs, Schieffelin & Co, St Paul, S'h'ton
33 cs, J Personini, Kaiser Wm II, Genoa
1 cs, McKesson & Robbins, St Paul, S'h'ton
11 cs, E Fougera & Co, Europe, London
ROOTS—3 cs, Schieffelin & Co, Palatia, H'b'g
9 cks, Parke, Davis & Co, Palatia, H'b'g
SEEDS—214 bgs, 21,707 lbs, Peek & Velsor, Pembridge, H'b'g
1 bg, Stallman & Fulton, St Paul, S'h'ton
OLIVE FOOTS—25 bbls, Oil Seeds Pressing Co, Manilla, Genoa
50 bbls, J W Hampton, Jr, & Co, Citta di Palermo, Leghorn
50 bbls, O G Mayer & Co, California, Leghorn
ORANGE—5 cs, Crandall & Godley Co, Cilurnum, Messina
ORIGANUM—5 cs, G Lueders & Co, Ems, Genoa
PALM—14 cks, R Crooks & Co, Tauric, Lpl
25 cks, United Oil Co, Pembridge, Hbg
ROSE—1 cs, G Lueders & Co, Prins Regent Luitpold, Bremen
THYME—1 cs, G Lueders & Co, Ems, Genoa
3 cs, A A Stilwell, Ems, Genoa
TURKEY RED—33 bbls, A Klipstein & Co, Tauric, Liverpool
OPIUM—27 cs, McKesson & Robbins, St Paul, Southampton
2 cs, 62 bls, Merck & Co, Lahn, Bremen
2 cs, 31 bls, Merck & Co, Aug Victoria, Hamburg
ORANGE, MINERAL—34 cks, 33,461 lbs, J M Huber, Rotterdam, Rotterdam
ORRIS ROOT—75 bls, Parke, Davis & Co, California, Leghorn
37 pkgs, A Chiris, California, Leghorn
PAINT, MARINE—36 dms, E George & Co, Bulgaria, Hamburg
PARANITRANILINE—4 cks, Geisenheimer & Co, Friesland, Antwerp
PEPPER—400 bgs, F H Leggett & Co, W B Flint, Alleppy
400 bgs, J W Phyfe & Co, W B Flint, Alleppy
200 bgs, D P Cruikshank, Foreric, London
SHELLS—150 bgs, J Kissock & Co, St Louis, Southampton
SHELLAC—425 cs, Rogers & Pyatt, Marquette, London
163 cs, Rogers & Pyatt, Marquette, London
SIENNA—10 bbls, 2,939 lbs, J W Coulston & Co, California, Leghorn
35 bbls, 13,150 lbs, D F Tiemann & Co, California, Leghorn
SOAP—1 cs, Lehn & Fink, Palatia
CASTILE—200 cs, 9,068 lbs, J C Butler, Ems, Genoa
SODA—19 cks, 23,049 lbs, Wing & Evans, Cufic, L'pool
117 cks, 207,429 lbs, Wing & Evans, Germanic, L'pool
BICARB—100 kgs, J L & D S Riker, Tauric, L'pool
CAUSTIC—50 bbls, J L & D S Riker, Tauric, L'pool
CHLO—200 kgs, A Klipstein & Co, Tauric, L'pool
CRYSTAL CARB—56 bbls, J L & D S Riker, Tauric, L'pool
SILICATE—50 cks, R Crooks & Co, Tauric, L'pool
SPONGE—52 bls, McKesson & Robbins, Santiago, Nassau
1 cs, McKesson & Robbins, St Paul, S'h'ton
14 bls, Lasker & Bernstein, Antilla, Nassau
57 bls, Lebess Sponge Co, Cherokee, Nassau
STRONTIA CARB—4 cks, H M Rau, Friesland, Ant
NITRATE—60 kgs, Rogers & Pyatt, Southwark, Antwerp
SULPHUR ORE—10,320,378 lbs, Penna Salt Mfg Co, Pola, Huelva
SUMAC—1 bg, Standard Dyeing Co, Pr Regent Luitpold, Bremen
870 bgs, W L Montgomery & Co, Acacia, Palermo
EXT—59 bbls, J J Keller & Co, Friesland, Ant
10 cks, Kennedy & Moon, Etruria, L'pool
2 cks, Standard Dyeing Co, Pr R Luitpold, Bremen
20 cks, 10,172 lbs, J A & W Bird & Co, Ems, Genoa

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CASTOR
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CORRESPONDENCE SOLICITED.

LEAF—200 bls, W L Montgomery & Co, Acacia, Palermo
TALC—300 bgs, 66,000 lbs, Gabriel & Schall, Ems, Genoa
250 bgs, 55,000 lbs, Hammill & Gillespie, California, Leghorn
TAMARINDS—6 bbls, 1,500 lbs, A N Andrus & Co, Madiana, Domenica
TOLUIDINE—9 dms, 8,637 lbs, W J Matheson & Co, Marquette, London
TOLULE, BINITRO—15 kgs, Farb of Elberfeld Co, Friesland, Ant
TURMERIC—960 bgs, Darragh & Small, W B Flint, Alleppy
TUSCAN RED—31 cks, G A & E Meyer, Martello, Hull
ULTRAMARINE—1 cs, C Helmuth, Rotterdam, R'dam
17 cs, C F Zentgraf, Rotterdam, R'dam
15 cks, Pickhardt & K, Edam, R'dam
UMBER—25 bbls, 11,363 lbs, Chilton Mfg Co, California, Leghorn
VANILLA BEANS—25 cs, Charles E Hires Co, La Champagne, Havre
VANILLIN—1 cs, 500 oz, Fritsche Bros, Pr Regent, Luitpold, Bremen
VARNISH—5 cs, C Helmuth, Rotterdam R'dam
14 cs, Pomeroy & Fischer, Europe, London
7 cs, A E Londerbach, Europe, London
73 pkgs, Pomeroy & Fischer, Marquette, London
VENETIAN RED—60 cks, G A & E Meyer, Martello, Hull
175 cks, J L Smith & Co, Campania, L'pool
21 cks, Hemingway & Co, Marquette, London
VERDIGRIS—6 cks, Jaeck Bros Co, La Champagne, Havre
VERMILION—2 cks, Binney & Smith, Tauric, L'pool
6 cs, J M Huber, Palatia, H'b'g
WAX, BEES—2 bbls, 430 lbs, C Wessels & Bro, Athos, Kingston
2 bbls, 425 lbs, C Wessels & Bro, Ardanrose, Kingston
CERESIN—30 bgs, 6,600 lbs, C M Heide, Pennsylvania, H'b'g
MINERAL—166 bgs, C Morningstar, Pembridge, H'b'g
JAPAN—50 cs, Schoellkopf, H & M, Palatia, H'b'g
ZINC, OXIDE—50 cks, 22,046 lbs, H W Henning & Son, Friesland, Ant

WAREHOUSED.

ACID, CITRIC—450 kgs, Dodge & Olcott, Citta di Palermo, Messina
ALBUMEN—10 cks, C Morningstar & Co, Pembridge, Hamburg
ANILINE COLORS—174 cks, 24 cs, W J Matheson & Co, Rotterdam, Rotterdam
4 kgs, J Campbell & Co, Friesland, Ant
BAY RUM—9 bbls. 207 gals, H A Batjer & Co, Caracas, Ponce
8 cks, 385 gals, Dodge & Olcott, Madiana, Domenica
BRISTLES—22 cs, C Grubnau, Menominee, London
CANARY SEED—761 bgs, J D Nordlinger, Stalheim, Smyrna
250 bgs, I Kubie & Co, Stalheim, Smyrna
200 bgs, G W Sheldon & Co, Stalheim, Smyrna
500 bgs, C Rosenstein & Co, Stalheim, Smyrna
111 bgs, J W Rosenstein & Son, Stalheim, Smyrna
500 bgs, H Nordlinger & Co, Stalheim, Smyrna
200 bgs, Wood & Selick, Stalheim, Smyrna
CHEMICAL COMP—9 cs, E Levi, Rotterdam, Rotterdam
CORKS—18 bls, L Mundet & Son, St Paul, Southampton
GALL EXT—10 cks, 5,500 lbs, J J Keller & Co, Friesland, Antwerp
GLUE—100 bgs, A K Gardiner & Bro, Etruria, Liverpool
GUM CHICLE—87 bls, 7,100 lbs, Eggers & Heinlein, Ardanrose, Belize
76 bls, 7,035 lbs, A S Lascelles & Co, Ardanrose, Belize
230 pkgs, 42,541 lbs, E N Tibbals, City of Washington, Tampico
LOGWOOD EXT—81 cks, Dillon & Co, Ardanrose, Kingston
MICA—6 cs, 848 lbs, A D Schoonmaker, Etruria, Liverpool
OIL, BAY—25 cs, Phillips & Son, Arkadia, Arroyo
OPIUM—75 cs, 2,550 lbs, E Hills' Son & Co, Stalheim, Smyrna
50 cs, Dodge & Olcott, Stalheim, Smyrna
10 cs, Perry, Ryer & Co, Stalheim, Smyrna
PHENYLENDIAMINE—20 cks, W J Matheson & Co, Rotterdam, Rotterdam
POTASH, CHLO—100 kgs, 11,200 lbs, Rogers & Pyatt, Tauric, Liverpool
400 kgs, 44,800 lbs, Rendrock Powder Co, Norge, Copenhagen
CYANIDE—25 cs, Schoellkopf, H & M, Europe, London
SPONGE—3 bls, A Isaacs & Co, Santiago, Nassau
242 bls, Lasker & Bernstein, Santiago, Nassau
31 bls, Lasker & Bernstein, Antilla, Nassau
STRYCHNINE—18 cs, E Levi, Edam, R'dam
ZINC, SANTONATE—8 bbls, Schoellkopf, H & M, Pennsylvania, Hamburg

Withdrawals from Bond.

Week ending June 16.

Ammonia, Carb., kgs	2
Aniline Colors, cks	191
Aniline Colors, cs	21
Bay Rum, cks	4
Bronze Powder, cs	6
Canary Seed, bgs	284
Capsicums bgs	337
Chemical Comp., cs	5
Cocoa Butter, bls	16
Colors, cs	6
Corks, bls	63
Gall Ext., cks	5
Glue, cks	24
Gum Chicle, bgs	30
Gum Chicle, bls	106
Licorice Paste, cs	5
Logwood Ext., cks	81
Medical Prep., cs	3
Mica, bbls	4
Oil, Codliver, bbls	25
Ess'l., cs	11
Sandalwood, pkgs	10
Opium, cs	10
Paint, dms	40
Persian Berry Ext., cks	5
Potato Starch, bgs	35
Sage, bls	10
Sponge, bls	19
Varnish, dms	6

Boston Imports.

ACID, OXALIC—25 cks, J L & D S Riker, Cephalonia, Liverpool
ALIZARINE—87 cs, Farbenfabricken, Elberfeld Co, Storm King, Ant
ANILINE COLORS—6 pkgs, A Merritt, Victorian, L'pool
1 cs, Howe Balch, Victorian, L'pool
5 bbls, F E Atteaux, Storm King, Ant
31 bbls, Storm King, Ant
SALTS—26 cs, J A & W Bird Co, Victorian, L'pool
95 bgs, Storm King, Antwerp
ANTICHLOR—50 kegs, Storm King, Antwerp
BLEACH—126 cks, J L & D S Riker, Canada, L'pool
47 cks, J L & D S Riker, Victorian, L'pool
93 cks, Corinthia, Liverpool
270 cks, Michigan, Liverpool
68 cks, J L & D S Riker, Michigan, L'pool
BRIMSTONE—824 bgs, Victorian, L'pool
BRISTLES—57 cs, Bostonian, London
CHINA CLAY—400 cks, Cephalonia, Liverpool
320 cks, Victorian, Liverpool
COLORS—5 cks, Healey Seaver, Victorian, Liverpool
21 cks, W N Proctor, Victorian, L'pool
CREOSOTE—184 bbls, Bostonian, London
CRYSTAL CARBONATE—56 bbls, J L & D S Riker, Michigan, L'pool
CUTCH—200 bxs, Bostonian, London
DYEWOOD EXT—25 cks, W N Proctor, Victorian, Liverpool
GLASS—2,289 cs, J B Moors, Storm King, Ant
5,671 cs, Storm King, Antwerp
GREASE—50 bbls, G H Leonard, Storm King, Ant
84 cs & 350 bbls, Storm King, Antwerp
SOD—60 bbls, Cephalonia, Liverpool
INDIGO—18 cs, Storm King, Antwerp
21 cs, Bostonian, London
40 cs, Arnold, Hoffman & Co, Bostonian, London
OIL, PALM—36 cks, Corinthia, Liverpool
141 cks, Michigan, Liverpool
PITCH—450 cks, Bostonian, London
SALTPETRE—740 bgs, Bostonian, London
SODA ASH—14 cks, Morey & Co, Victorian, Liverpool
20 cks, Brown Bros, Michigan, Liverpool
CAUSTIC—100 drms, Edw Hills' Son & Co, Cephalonia, Liverpool
CHLOR—200 kegs, J L & D S Riker, Canada, L'pool
SUMAC—594 bgs, J B Moors, Canada, L'pool
350 bgs, Canada, Liverpool
106 bgs, J B Moors, Michigan, Liverpool
TAPIOCA—240 bgs, T Leyland, Canada, L'pool
TAR COAL—200 bbls, Peruvian, Glasgow
WAX, BEES'—24 bgs, Victorian, Liverpool
ZINC OXIDE—50 cks, J A & W Bird Co, Storm King, Ant

Philadelphia Imports.

ACID, OXALIC—20 cks, Pickhardt & Kuttroff, Nederland, Ant
PHOSPHORIC—20 cs, Rosengarten & Sons, Masconorno, London
20 cks, Powers & Weightman, Masconorno, London
AMMONIA, MURIATE—20 cks, E R Warrington & Co, Belgenland, L'pool
ANILINE COLORS—8 bbls, O S Janney & Co, Nederland, Antwerp
72 cks, Berlin Aniline Wks, Armenia, H'b'g
6 cks, Armenia, Hamburg
SALT—50 bbls, Nederland, Antwerp
ANTICHLOR—116 cks, Armenia, Hamburg
BARK—157 bales, Powers & Weightman, Osborne, London
BLEACH—125 drs, O S Janney & Co, Armenia, Hamburg
BONES—1,100 tons, Bough & Son Co, Carrie Winslow, Rosario
CHALK—800 tons, Wesenberg & Co, Theodore Fischer, London
340 tons, Osborne, London
CHINA CLAY—150 cks, Dunn Bros, Belgenland, L'pool
500 cks, Dunn Bros, Italia, L'pool
DYESTUFF—11 bbls, Hanna-Schoellkopf Co, Nederland, Ant
NATRON—200 cks, Chas Lennig & Co, Armenia, Hamburg
78 cks, Nederland, Antwerp
NUX VOMICA—100 bgs, Powers & Weightman, Osborne, London
OCHRE—35 bbls, Robt Shoemaker & Co, Nederland, Ant
OIL, COD LIVER—10 bbls, Smith, Kline & French Co, Armenia, H'b'g
PALM—64 cks, Belgenland, Liverpool
SULPHUR—100 bbls, M W Phillips, Belgenland, L'pool
PEPPER—136 bgs, Maryland, London
POTASH—50 dms, Edw Hills' Son & Co, Nederland, Ant
10 cks, Powers & Weightman, Nederland, Ant
46 cks, A Klipstein & Co, Nederland, Ant
POTATO STARCH—100 bgs, Armenia, Hamburg
SODA PHOSPHATE—26 bbls, Rosengarten & Sons, Nederland, Antwerp
PRUSS—16 cks, Masconorno, London
YOLK ASH—201 cks, Carter & Scattergood, Armenia, Hamburg
ZINC OXIDE—120 bbls, Devoe & Reynolds, Nederland, Antwerp

Baltimore Imports.

ANTIMONY—99 cs, Bethania, Hamburg
BLEACH—25 bxs, Vedamore, Liverpool
CHINA CLAY—250 cks, Vedamore, Liverpool
GREASE, WOOL—300 bbls, Bethania, Hamb'g
MANGANESE FERRO—102 tons, Vedamore, Liverpool
MANURE SALT—4,000 bgs, Munchun, Bremerhaven
PAINT—42 cks, Vedamore, Liverpool
POTASH CARBONATE—3 bxs, Vedamore, Liverpool
CAUSTIC—55 dms and 10 bxs, Vedamore, Liverpool
MURIATE—1,000 bgs, Bethania, Hamburg
SODA, CAUSTIC—10 drms, 35 bbls and 35 bxs, Vedamore, Liverpool

Newport News Imports.

ACID, GALLIC—1 ck, Meyer Bros Drug Co, Kanawha, London
PHOSPHORIC—23 cs, Mallinckrodt Chem Co, Kanawha, London
PYROGALLIC—2 cs, Meyer Bros Drug Co, Kanawha, London
AMMONIA SULPHATE—100 bgs, Wilfred Schad & Co, Kanawha, London
BLEACH—14 cks, Read, Holliday & Sons, Rapidan, Liverpool
254 cks, J L & D S Riker, Rapidan, Liverpool
CHINA CLAY—1,769 cks, Morey & Co, Rapidan, Liverpool
200 cks, Hammill & Gillespie, Rapidan, Liverpool
FULLERS' EARTH—500 bgs, L A Solomon & Bro, Rapidan, Liverpool
2,050 bgs, L A Solomon & Bro, Kanawha, London
GLYCERINE—100 drs, Proctor & Gamble Co, Rapidan, Liverpool
OIL, COCOANUT—17 pipes and 16 puncheons, M L Barrett & Co, Kanawha, London
44 pipes, 6 puncheons and 30 hhds, United Oil Co, Kanawha, London
HARLEM—25 cs, M L Barrett & Co, Kanawha, London
SODA ASH—20 cks, Isaac Winkler & Bro, Rapidan, Liverpool

New Orleans Imports.

CANDLES—50 cs, Liviand, Hamburg
CLAY—100 bbls, Liviand, Antwerp
OIL, TAR—44 bbls, Liviand, Hamburg

San Francisco Imports.

BARYTES CARB—240 bgs, Wynford, Antwerp
BRIMSTONE—300 bbls and 600 bgs, Bank of B N Am, Wynford, Ant
GLASS, WINDOW—9,444 cs, London Hill, Ant
GREASE—150 bbls, G H Leonard, Wynford, Ant
OIL—250 cs, A Vignier, Wynford, Ant
POTASH—15 pkgs, San Jose, L'pool
SHEEP DIP—1,000 dr, Wynford, Ant
SOAP—400 cs, A Vignier, San Jose, Marseilles
900 cs, J De Fremery & Co, San Jose, Marseilles
350 cs, Wynford, Ant
200 cs, A Vignier, Wynford, Ant
200 cs, G B & Co, Wynford, Ant
100 cs, Pascol Dubedat, Wynford, Ant
500 cs, Pascol Dubedat, San Jose, Marseilles
SODA, CAUSTIC—20 bxs, San Jose, L'pool

Montreal Imports.

ACID, BORACIC—12 pkgs, Scotsman, L'pool
ALUM—10 bls, Amarynthia, Glasgow
25 cks, Georgian, L'pool
CAKE—38 cks, Iona, Newcastle
ALUMINOFERRIC—76 cks, Georgian, L'pool
AMMONIA—20 cks, Georgian, L'pool
CARBONATE—50 kegs, Monte Videan, London
SAL—3 bbls, Scotsman, L'pool
BLEACH—10 bbls and 21 cks, Georgian, L'pool
BORAX—40 cks and 20 pkgs, Scotsman, L'pool
BRIMSTONE—5 cks and 75 kegs, Antwerp City, H'b'g
500 bgs, Scotsman, L'pool
802 pks, Georgian, L'pool
CHEMICALS—22 cks and 30 bbls, Scotsman, L'pool
CHINA CLAY—110 cks and 300 bgs, Georgian, L'pool
250 bgs, Amarynthia, Glasgow
COLOR—1 ck, Georgian, L'pool
CREAM TARTAR—11 cks, Amarynthia, Glasgow
2 pkgs, Californian, L'pool
GLASS, PLATE—37 cs, Californian, L'pool
WINDOW—637 cs, Californian, L'pool
758 cs, Scotsman, L'pool
GLUE—10 bgs, Amarynthia, Glasgow
GLYCERINE—130 cs, Scotsman, L'pool
50 cs, Georgian, L'pool
LOGWOOD—50 bgs, Amarynthia, Glasgow
MAGNESIA, CARBONATE—2 cks, Amarynthia, Glasgow
NITRATE, LEAD—5 cks, Amarynthia Glasgow
OIL, CASTOR—2 bbls and 22 cs, Iona, Newcastle
100 cs, Californian, L'pool
FITCH—432 bls, Sarmatian, Glasgow
POTASH—10 cks, Georgian, L'pool
BICHROME—30 cks, Amarynthia, Glasgow
6 cks, Sarmatian, Glasgow
PRUSS—2 cks, Amarynthia, Glasgow
RED LEAD—93 cks, Iona, Newcastle
SOAP—1 cs, Amarynthia, Glasgow
SODA—250 bgs and 7 cks, Georgian, L'pool
56 bbls, Scotsman, L'pool
ASH—120 bgs, Californian, L'pool
BICARB—100 drs and 10 cks, Georgian, L'pool
105 pkgs, Scotsman, L'poof
CAUSTIC—40 drs, Californian, L'pool
CRYSTAL—100 bgs and 2 bbls, Georgian, L'pool
VARNISH—2 bbls, Iona, Newcastle

EXPORTS FROM NEW YORK.

Week ending June 16.

ACID—10 drs, $203, Mary E Morse, Havana
3 cbys, $12, Santiago, Nassau
4 drs, $110, City of Washington, Tampico
CARBOLIC, CRUDE—2 bbls, $20, Altai, Kingston
CITRIC—2 kegs, $90, Ardanrose, Kingston
MURIATE—12 cbys, $30, Vigilancia, Vera Cruz
SULPHURIC—50 cs, $735, Matanzas, Tampico
25 drs, $370, Vigilancia, Vera Cruz
3 cbys, $74, Ilsenstein, Cuba
10 cbys, $38, Altai, Savanilla
TARTARIC—1 cs, $40, Hildur, Maracaibo
1 bbl, $132, Advance, Colon
ALCOHOL, WOOD—13 bbls, $447, Ellen A. Reed, Melbourne
ALFALFA SEED—200 bgs, $3,000, Parana, Rosario
AMMONIA—5 cbys, $230, Orinoco, Bermuda
30 cyls, $1,339, Havana, Havana
4 drs, $104, Madiana, Barbadoes
BARK—290 bgs, $250, Stalheim, Havre
1,000 bgs, $800, Woolloomooloo, Havre
EXTRACT—50 bbls, $500, Stalheim, Havre
52 bbls, $613, St Andrew's, Antwerp
BEANS, VANILLA—12 bxs, $1,600, La Champagne, Havre
3 cs, $450, Europe, London
BONE BLACK—2 bbls, $9, Matanzas, Tampico
PITCH—34 tcs, $228, Europe, London
BONES—308 bgs, $385, La Champagne, Havre
BORAX—3 bbls, $87, Vigilancia, Vera Cruz
CALCIUM CARBIDE—5 tins, $30, Kvarven, Trinidad
110 cs & 25 drs, $535, Dalcqurlia, Rio Janeiro
CANDLES—10 cs, $20, Julia France, Humacao
40 bxs, $80, Kvarven, C Bolivar
100 cs, $394, Mary E Morse, Havana
200 cs, $295, Vigilancia, Havana
5 cs, $10, Hildur, Curacao
32 cs, $60, Ilsenstein, Cuba
2 bxs, $4, Santiago, Nassau
50 cs, $216, Hildebrand, Para
5 cs, $22, Hildebrand, Manaos
115 cs, $700, Manuel L Villaverde, Havana
10 bxs, $29, Venturer, San Andreas
450 cs, 22 bxs, $829, Arkadia, Porto Rico
3 bxs, $7, Altai, Kingston
6 bxs, $12, Orinoco, Bermuda
20 bxs, 45 cs, $152, Ardanrose, Kingston
CARBON—250 bxs, $540, Hogarth, Manchester
372 bbls, $1,860, Stalheim, Havre
199 bbls, $1,500, Wooloomooloo, Havre
50 bbls, $176, State of Nebraska, Glasgow
10 bbls, $150, St Andrew, Antwerp
CASSIA—10 bls, $49, Hildur, Maracaibo
7 bls, $38, Arkadia, Porto Rico
COPPER, SULPHATE—23 bbls, $640, Victoria, Leghorn
223 bbls, $13,117, Victoria, Marseilles
417 bbls, $11,996, Ems, Genoa
CREAM TARTAR—20 kegs, $400, Alice, Auckland
DYEWOOD—25 bbls, $217, Aurania, Liverpool
EXTRACT—50 bxs & 5 bbls, $423, Pennsylvania, H'b'g
100 bxs, $274, Rotterdam, Rotterdam
6 bbls, $51, Anchoria, Glasgow
FERTILIZER—10 bbls, $53, Arkadia, Porto Rico
10 bbls, $60, Santiago, Nassau
60 bags, $159, Ardanrose, Jamaica
GLUCOSE—250 bbls, $2,439, Cuvier, Manchester
160 bbls, $1,292, Nomandic, Manchester
49 bbls, $390, Biela, Manchester
400 bbls, $4,030, Ellen A Reed, Melbourne
1,152 bbls, $16,266, Exeter City, Bristol
872 bbls, $6,966, State of Nebraska, Glasgow
100 bbls, $795, Martello, Hull
2 bbls, $26, Portia, St Johns, N F
4 bbls, $45, Advance, Colon
GLUE—38 bgs, $410, Victoria, Marseilles
1 cs, $40, St Paul, Southampton
15 cks, $150, Bremen, Bremen
2 bbls, $48, Vigilancia, Havana
4 bbls, $121, Vigilancia, Vera Cruz
2 bbls, $65, Ilsenstein, Cuba
2 bbls, $54, Santiago, Cuba
4 cks, $200, La Champagne, Havre
2 bbls, $44, Manuel L Villaverde, Progreso
1 bbl, $2, Advance, Colon
2 bbls, $30, Arkadia, Porto Rico
1 bbl, $29, Orinoco, Bermuda
3 bbls, $90, Ellen A Reed, Melbourne
FISH—2 bbls, $100, La Champagne, Havre
GOLDEN SEAL ROOT—17 bgs, $432, Pennsylvania, Hamburg
GREASE, SOAP—60 tcs, 124 bbls, $1,325, Aurania, Liverpool
120 tcs, $1,735, Victoria, Marseilles
150 bbls, $2,080, Pennsylvania, Hamburg

Kryofine Pat. Aminoform Vanillin Crystals Hydragogin
Antipyrine C. P., Powder or Crystals Heliotropin Crystals Camphoroxol
Diathesin Oxalic Acid Bisol Sapodermin Menthoxol
C BISCHOFF & CO. 87–89 PARK PLACE, NEW YORK

130 tcs, $2,244, Rotterdam, Rotterdam
LUB—12 bbls, $205, Cuvier, Manchester
55 cs, $112, Pellegrina O, Freemantle
17 tcs, $275, Knarven, Trinidad
15 bbls, $130, Hildur, Maracaibo
50 cs, $151, Ellen A Reed, Melbourne
16 pkgs, $267, Manitou, London
30 bbls, $238, Ems, Genoa
30 cs, $63, Anchoria, Glasgow
4 kgs, $9, Manuel L Villaverde, Havana
2 cs, $2, Arkadia, Porto Rico
1 cs, $5, Havana, Havana
KALSOMINE—39 cs & 21 bgs, $412, Ellen A Reed, Melbourne
LEAD—7,013 pigs, 671,830 lbs, $20,161, Cuvier, Manchester
4,495 pigs, 448,111 lbs, $12,000, Nomadic, Manchester
2,940 pigs, 280,134 lbs, $7,500, State of Nebraska, Glasgow
3,516 pigs, 336,105 lbs, $9,000, Pennsylvania, Hamburg
2,560 pigs, 224,000 lbs, $6,000, Anchoria, Glasgow
4,671 pigs, 448,040 lbs, $13,447, Biela, Manchester
LIME, ACETATE—475 bgs, $1,140, Britannia, Liverpool
1,402 bgs, $2,250, Patricia, Hamburg
765 bgs, $1,725, Pennsylvania, Hamburg
5,004 bgs, $9,048, St Andrew, Antwerp
LOGWOOD—3 bbls, $10, Santiago, Cuba
EXTRACT—4 bxs, $7, Vigilancia, Vera Cruz
OCHRE—219 bbls, $750, Stalheim, Havre
OIL, CAKE—1,766 bgs, $5,500, Normadic, Manchester
5,229 bgs, $16,338, Noordland, Antwerp
335,780 lbs, $3,860, Exeter City, Bristol
1,121 bgs, $3,401, Martello, Hull
1,500 bgs, $5,070, Rotterdam, Rotterdam
1,544 bgs, $4,520, St Andrew, Antwerp
COCOANUT—2 bbls, $93, Matanzas, Progress
CORDAGE—32 bbls, $190, Ellen A Reed, Melbourne
CORN—240 bbls, $3,110, Martello, Hull
COTTONSEED—2 bbls, $20, Caribee, Demerara
10 bbls, $145, Caribee, Barbados
20 cs, $104, Matanzas, Progreso
5 bbls, $75, St Paul, Southampton
100 bbls, $1,540, Stalheim, Havre
190 bbls, $2,933, Woolloomooloo, Havre
120 bbls, $3,125, State of Nebraska, Glasgow
60 bbls, $300, Martello, Hull
50 bbls, $750, Ems, Genoa
60 bbls, $650, Etruria, Liverpool
75 bbls, $1,400, Anchoria, Glasgow
155 bbls and 250 cs, $3,510, Bellucia, Montevideo
5 cs, $19, Advance, Colon
82 cs and 10 bbls, $383, Altai, Kingston
100 bbls, $1,452, Dalecarlia, Rio Janeiro
15 bbls, $195, Europe, London
172 cs and 8 bbls, $664, Ardanrose, Jamaica
CYLINDER—15 bbls, $387, Havana, Havana
ESS'L—63 cs, $1,949, Manitou, London
9 cs, $231, Ems, Genoa
59 cs, $3,309, Pennsylvania, Hamburg
1 cs, $13, Altai, Kingston
30 cs, $846, Europe, London
LARD—2 bbls, $41, Caribee, Demerara
50 bbls, $1,058, Stalheim, Havre
60 bbls, $1,250, Etruria, Liverpool
1 bbl, $25, Orinoco, Bermuda
35 bbls, $703, Biela, Manchester
LINSEED—13 bbls, $270, Matanzas, Tampico
1 bbl, $24, Venturer, San Andreas
8 cs, $37, Arkadia, Porto Rico
3 bbls, $63, Ilsenstein, Cuba
1 cs, $4, Santiago, Nassau
2 bbls, $40, Santiago, Cuba
10 cs, $58, Manuel L Villaverde, Progreso
5 cs, $26, Advance, Colon
2 bbls and 10 cs, $87, Arkadia, Porto Rico
2 cs, $10, Altai, Greytown
2 bbls, $42, Havana, Havana
LUB—10 bbls, $50, Kaiser Wm der Grosse, Bremen
2,395 bbls, $11,775, Cuvier, Manchester
684 bbls, $3,140, Normadic, Manchester
220 bbls, $3,600, La Gascogne, Havre
20 cs, $49, Pellegrina O, Freemantle
15 bbls, $100, Caribee, Demerara
4 cs, $110, Advance, Colon
10 bbls and 1 cs, $97, Mary E Morse, Havana
10 bbls, $100, Noordland, Antwerp
10 cs, $370, Kvarven, San Fernando
1 bbl, $15, Arkadia, Porto Rico
10 bbls, $39, Venturer, San Andreas
36 bbls, $258, Stalheim, Havre
3 bbls, $30, Hildur, Maracaibo
529 bbls, $4,609, Ellen A Reed, Melbourne
65 bbls, $300, State of Nebraska, Glasgow
40 cs and 2 bbls, $55, Santiago, Nassau
5 bbls, $87, Santiago, Cuba
60 bbls and 30 cs, $500, Hildebrand, Manaos
390 bbls, $5,500, Etruria, Liverpool
182 bbls, $1,739, Ems, Genoa
1,705 bbls and 25 cs, $10,756, Martello, Hull
500 bbls, $2,500, La Champagne, Havre
778 bbls, $6,977, Pennsylvania, Hamburg
775 bbls and 451 cs, $7,373, Norge, Copenhagen
120 bbls, $854, Norge, Riga
72 bbls and 35 cs, $757, Norge, Christiania
150 bbls, $750, Norge, Gothenburg
1,481 bbls and 100 cs, $13,130, Rotterdam, Rotterdam
777 bbls, $5,531, Anchoria, Glasgow
2 cs, $10, Manuel L Villaverde, Havana
100 cs and 17 bbls, $448, Bellucia, Montevideo
10 cs, $27, Bellucia, Rosairo
140 cs and 6 bbls, $323, Bellucia, Buenos Ayres
1,183 bbls, $6,603, St Andrew, Antwerp
120 bbls and 8 cs, $958, Portia, St John's, N F
2 bbls, $32, Arkadia, Porto Rico
20 cs and 5 bbls, $228, Advance, Colon
50 bbls, $462, Altai, Kingston
48 bbls, $535, Edam, Amsterdam
6 bbls, $47, Olinda, Hayti
100 bbls, $690, Peninsular, Lisbon
1,752 bbls, $8,660, Biela, Manchester
1,240 bbls, $6,700, Europe, London
100 cs, $112, Ardanrose, Jamaica
70 cs, $140, Alice, Auckland
60 cs, $75, Alice, Wellington
2 bbls, $31, Madiana, Barbadoes
MEAL—400 bgs, $660, Caribee, Barbadoes
825 bgs, 31,286, Kvarven, Trinidad
240 bbls, $370, Kvarven, San Fernando
2 bbls & 1 bg, $9, Orinoco, Bermuda
MIN'L COLZA—70 bbls, $350, Cuvier, Manchester
200 bbls, $1,000, Kaiser Wilhelm der Grosse, Bremen
50 bbls, $250, Normadic, Manchester
1,375 cs, $2,750, Ellen A. Reed, Melbourne
75 bbls, $375, Martello, Hull
110 bbls, $550, Pennsylvania, H'b'g
150 bbls, 20 cs, $807, Anchoria, Glasgow
50 bbls, $250, Peninsular, Lisbon
560 bbls, $2,500, Europe, London
NEATSFOOT—3 cs, $87, Vigilancia, Havana
OLEO—100 bbls, $3,200, Bulgaria, Hamburg
35 tcs, $210, State of Nebraska, Glasgow
120 tcs, $2,576, Manitou, London
60 tcs, $1,380, Martello, Hull
1,249 tcs, $32,300, Pennsylvania, H'b'g
1,594 tcs, $49,877, Rotterdam, Rotterdam
50 tcs, $1,410, Norge, Christiania
165 tcs, $5,710, Anchoria, Glasgow
PALM—1 bbl, $27, Arkadia, Porto Rico
PEP—8 cs, $360, Pennsylvania, Hamburg
RED—120 bbls, $600, Francisco, Hull
SEWING MACH—9 cs, $23, Hildebrand, Para
SPERM—6 bbls, $391, Ethiopia, Glasgow
WHITING—40 bbls, $195, Oriel, Rotterdam
PAINT—13 kgs, $299, Cuvier, Manchester
7 cs, $111, Pellegrina O, Freemantle
3 cs, $48, Caribee, Barbadoes
20 kgs, $25, Portia, Halifax
1 cs, $13, Kvarven, C Bolivar
3 cs, 1 kg & 1 bbl, $74, Matanzas, Tampico
8 bbls & 2 cs, $216, Arkadia, Porto Rico
5 cs, $85, Vigilancia, Havana
12 bbls, $756, Vigilancia, Vera Cruz
1 cs, $4, Hildur, Curacao
241 kgs, $743, Pembridge, Hamburg
4 pkgs, $84, Ilsenstein, Cuba
2 bbls, 1 bx, $19, Santiago, Nassau
3 bbls & 1 cs, Santiago, Cuba
20 kgs, $101, Anchoria, Glasgow
12 cs, $536, Bellucia, Montevideo
12 cs & 1 bbl, $73, Advance, Colon
2 cs, $47, Altai, Kingston
1 bbl, $27, Altai, Cartagena
2 kgs, $6, Altai, Greytown
1 cs, $55, Orinoco, Bermuda
5 bbls, $298, Antilla, Nassau
6 bxs, $40, Havana, Havana
2 cs, $30, Dalecarlia, Santos
5 pkgs, $214, Ellen A Reed, Melbourne
2 cs, $30, Ardanrose, Jamaica
PETROLEUM—(See Petroleum Clearances on page 22)
PETROLEUM JELLY—40 bbls, $869, Advance, Colon
200 bbls, $1,376, Europe, London
PITCH—12 bbls, $13, Kvarven, Trinidad
25 cs & 50 dr, $107, Hildebrand, Para
3 bbls, $8, Advance, Colon
2 bbls, $5, Altai, Cartagena
PLUMBAGO—11 bbls, $327, Martello, Hull
20 cs, $56, Europe, London
ROOTS—57 bls, $493, Manitou, London
10 bls, $275, St Andrews, Antwerp
ROSIN—100 bbls, $390, Albertina, Rosario
120 bbls, $385, Advance, Colon
150 bbls, $498, Kvarven, C Bolivar
50 bbls, $141, Hildur, Maracaibo
418 bbls, $993, Hildebrand, Para
200 bbls, $610, Asiatic Prince, Santos
750 bbls, $1,130, Anchoria, Glasgow
12 bbls, $49, Advance, Colon
22 bbls, $57, Arkadia, Porto Rico
400 bbls, $1,950, Biela, Manchester
100 bbls, $380, Dalecarlia, Rio Janeiro
100 bbls, $328, Ellen A Reed, Melbourne
SARSAPARILLA—32 bls, $750, Victoria, Marseilles
SIZING—45 bags, $705, Anchoria, Glasgow
SNAKE ROOT—6 bls, $140, Europe, London
SOAP—3 cs, $293, Pellegrina O, Freemantle
3 cs, $95, Caribbee, Barbadoes
1 cs, $385, Advance, Colon
3 bxs, $18, Mary E Morse, Havana
10 bxs, $22, Julia Frances, Humacao
2,000 bxs, $7,200, Britannia, Liverpool
5 cs, $24, Kvarven, Trinidad
2,000 bxs, $7,200, Majestic, Liverpool
31 cs & 175 bxs, $376, Hildur, Maracaibo
350 bxs & 2 cs, $285, Hildur, Curacao
20 cs, $50, Ilsenstein, Cuba
25 cs, $475, State of Nebraska, Glasgow
19 bxs, $45, Santiago, Nassau
50 cs, $125, Santiago, Cuba
21 pkgs, $122, Hildebrand, Para
2,036 cs, $3,252, Manitou, London
9 cs, $257, La Champagne, Havre
7 bxs, $28, Pennsylvania, Hamburg
5 cs, $115, Manuel L Villaverde, Progreso
20 cs, $355, Bellucia, Buenos Ayres
53 cs, $116, Advance, Colon
13 bxs, $237, Arkadia, Porto Rico
13 bxs, $38, Altai, Kingston
50 cs & 10 bxs, $234, Altai, Savanilla
5 bxs, $9, Altai, Greytown
43 bxs, $55, Orinoco, Bermuda
200 bxs, $110, So Cambria, Hayti
7 cs, $90, Havana, Havana
1 cr, $13, Ellen A Reed, Melbourne
65 bxs, $92, Ardanrose, Jamaica
BARK—10 bbls, $120, Ellen A Reed, Melbourne
STOCK—300 bbls, $1,050, Normadic, Manchester
818 bbls, $3,210, Europe, London
5 bbls, $19, Ardanrose, Jamaica
SODA, ASH—100 bgs, $100, Alice, Auckland
BICARB—200 kegs, $225, Ellen A Reed, Melbourne
40 kegs, $45, Alice, Auckland
CAUSTIC—2 dms, $25, Hildur, Maracaibo
NITRATE—794 bgs, $3,681, Caribee, Barbadoes
394 bgs, $1,925, Alice, Auckland
SAL—10 bbls, $22, Altai, Kingston
SPERMACETI—25 bxs, $413, Stalheim, Havre
25 bxs, $403, Pennsylvania, Hamburg
SPONGE—65 bls, $2,250, Noordland, Antwerp
10 bls, $1,000, Manitou, London
151 bls, $3,000, Pennsylvania, Hamburg
122 bls, $5,100, La Champagne, Havre
STARCH—600 bgs, $2,300, Cuvier, Manchester
1 bx, $3, Caribee, Barbadoes
10 cs, $11, Matanzas, Progreso
10 pkgs, $18, Vigilancia, Havana
50 bbls & 260 bxs, $754, State of Nebraska, Glasgow
2 bxs, $2, Santiago, Nassau
25 cs, $53, Hildebrand, Manaos
100 bgs, $300, Manitou, London
60 bxs, $136, Rotterdam, Rotterdam
150 bgs, $450, Anchoria, Glasgow
208 bgs, $400, St Andrew, Antwerp
20 bxs, $30, Advance, Colon
10 bxs, $11, Arkadia, Porto Rico
20 bxs, $23, Altai, Kingston
14 bxs & 7 bbls, $67, Orinoco, Bermuda
270 bbls & 2,250 bgs, $7,134, Biela, Manchester
41 bxs, $48, Ardanrose, Jamaica
STEARINE—48,470 lbs, $2,900, Ethiopia, Glasgow
25 hhds, $2,584, Martello, Hull
TALC—91 bgs, $207, Vigilancia, Vera Cruz
TALLOW—84 tcs, $1,660, Aurania, L'pool
50 tcs, $878, Normadic, Manchester
17 tcs, $350, Kvarven, Trinidad
60 tcs and 25 bbls, $1,326, Bremen, Bremen
300 tcs and 92 bbls, $8,068, Stalheim, Havre
205 tcs, $3,690, Martello, Hull
25 hhds, $1,500, Pennsylvania, H'b'g
210 tcs, $4,310, Rotterdam, R'dam
50 tcs, $1,435, Anchoria, Glasgow
2 bbls, $44, Advance, Colon
40 bxs and 37 tcs, $560, Altai, Kingston
25 cs and 38 tcs, $918, Altai, Savanilla
TAR—13 bbls, $50, Mary E Morse, Havana
15 bbls, $59, Kvarven, Grenada
10 cs, $7, Manuel L Villaverde, Havana
25 cs, $31, Vigilancia, Havana
15 cs, $19, Ilsenstein, Cuba
TURPENTINE—2,735 bbls, $43,300, Elderslie, London
95 cs, $458, Pellegrina O, Freemantle
1 bbl and 2 cs, $30, Caribee, Barbadoes
5 cs, $29, Advance, Colon
1 cs, $5, Kvarven, Trinidad
75 cs, $94, Manuel L Villaverde, Havana
10 cs, $25, Arkadia, Porto Rico
1 cs, $5, Hildur, Maracaibo
150 cs, $513, Mary E Morse, Havana
1 bbl and 40 cs, $175, Ilsenstein, Cuba
12 cs, $45, Santiago, Cuba
69 cs, $337, Hildebrand, Para
7 cs, $25, Manuel L Villaverde, Progreso
650 cs, $2,932, Bellucia, Buenos Ayres
8 bbls, 50 cs, $390, Portia, St John's, N F
42 cs, $265 Arkadia, Porto Rico
8 cs, $38, Altai, Cartagena
2 cs, $9, Altai, Greytown
95 cs, $374, Havana, Havana
450 cs, $1,945, Dalecarlia, Rio Janeiro
100 cs, $430, Dalecarlia, Santos
486 bbls, $9,600 Europe, London
2 cs, $9, Ardanrose, Jamaica
VARNISH—309 gls, $371, Cuvier, Manchester
415 gls, $175, Normadic, Manchester
20 gls, $15, Mary E Morse, Havana
235 gls, $450, Noordland, Ant
93 gls, $93, Kvarven, Trinidad
1,637 gls, $2,460, Stalheim, Havre
250 gls, $175, Exeter City, Bristol
50 gls, $40, Ilsenstein, Cuba
83 gls, $55, Santiago, Cuba
220 gls, $225, Hildebrand, Para
1,180 gls, $1,330, Pennsylvania, H'b'g
10 gls, $13, Arkadia, Porto Rico
70 gls, $57, Advance, Colon
50 gls, $43, Altai, Kingston
40 gls, $24, Altai, Cartagena
30 gls, $24, Orinoco, Bermuda
60 gls, $77, Antilla, Nassau
329 gls, $335, Havana, Havana
1,721 gls, $1,320, Europe, London
WAX, BEES—7,960 lbs, $2,307, Manitou, London
PAR—70 bbls, $920, Kaiser Wilhelm der Grosse, Bremen
510 bbls, $6,875, Cuvier, Manchester
300 bbls, $4,235, Normadic, Manchester
10 bgs, $130, Matanzas, Progreso
100 bbls, $1,000, European, London
50 cs, $500, Ellen A Reed, Melbourne
20 cs, $245, Hildebrand, Para
295 bbls, 575 bgs and 200 cs, $11,415, Pennsylvania, H'b'g
60 bbls, $905, Norge, Gothenburg
300 bgs, $3,000, Rotterdam, R'dam
80 bbls and 50 cs, $1,510, St Andrew, Ant
5 bbls, $58, Arkadia, Porto Rico
50 bbls, $555, Altai, Cartagena
15 cs, $183, Peninsular, Lisbon
465 bbls and 250 cs, $8,730, Biela, Manchester
956 bbls, $14,610, Europe, London
WHALEBONE—25 bdls, $5,075, Kaiser Wilhelm der Grosse, Bremen
4 cs, $2,500, La Gascogne, Havre
WHITE LEAD—2 kgs, $3, Matanzas, Tampico
12 kgs, 1 bbl, $30, Venturer, San Andreas
ZINC ASHES—17 bbls, $115, Noordland, Ant
129 pgs, $800, Exeter City, Bristol
166 bbls, $1,600, St Andrew, Antwerp
OXIDE—100 bbls, $800, Cuvier, Manchester
SKIMMINGS—35 pkgs, $800, Exeter City, Swansea
600 bbls, $6,000, Rotterdam, Rotterdam

Boston Exports.

CANDLES—66 bxs, Willard Mudgett, Sierre Leone and a market
GLUCOSE—95 bbls, Sachem, Liverpool
GLUE—15 pkgs, Norwegian, Glasgow
GREASE—289 bbls, 100 tcs, Mikado, Hull
75 hhds, Sachem, Liverpool
OIL—140 bbls, Armenian, Liverpool
CORN—140 bbls, Sachem, Liverpool
COTTONSEED—40 bbls, Willard Mudgett, Sierra Leone and a Market
MEAL—250 bgs, Mikado, Hull
OLEO—295 tcs, Mikado, Hull
PAINT—402 bbls, 20 cs, Armenian, Liverpool
SOAP—12 cs, Mikado, Hull
10 cs, Pavonia, Liverpool
TALLOW—680 tcs, Mikado, Hull
124 tcs, Sachem, Liverpool
WAX, PAR—19 bxs, Mikado, Hull
ZINC, SKIMMINGS—3 bbls, Baltimore, Ant

Philadelphia Exports.

BARK, EXTRACT—15 bbls, Rhyniand, Lpl
CARBON—160 bbls, 40 hhds, Mackinaw, Ldn
FERTILIZER—315 bgs, Switzerland, Antwerp
GLUCOSE—250 bbls, Mackinaw, London
75 bbls, Blaamanden, Rotterdam
GLUE—4 bbls, Nordkyn, Rotterdam
GRAPE SUGAR—1,000 bgs, Nordkyn, Rdm
4,450 bbls, 1,500 bgs, Mackinaw, London
GREASE—200 tcs, Switzerland, Antwerp
134 bbls, Rhyniand, Liverpool
23 bbls, Mackinaw, London
100 tcs, Haxby, Rotterdam
PET—214 bbls, Rhyniand, Liverpool
LIME, ACETATE—866 bgs, Switzerland, Ant
OIL, CAKE—1,075 bgs, Switzerland, Antwerp
3,471 bgs, Nordkyn, Rotterdam
729 bgs, Mackinaw, London
3,513 bgs, Haxby, Rotterdam

J. L. & D. S. RIKER

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IMPORTERS AND MANUFACTURERS' AGENTS

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Bleaching Powder

Crude Drug Department

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Alkanet Root
Aloes, Curacoa
Anise Seed
Buchu Leaves
Cardamoms
Cascarilla Bark
Chalk, Precip.
Chamomiles, German
Citric Acid
Colocynth Apples
Ergot
Gum Asafœtida
Gum Tragacanth
Orris Root

NEW NORWEGIAN COD LIVER OIL

COCOANUT—22 cs, Nordkyn, Rotterdam
LARD—2 bbls, Sutherland, Santiago de Cuba
LUB—1,232 bbls, Switzerland, Antwerp
25 bbls, Nordkyn, Rotterdam
1,660 bbls, Rhynland, Liverpool
103 bbls, Mackinaw, London
120 bbls, Haxby, Rotterdam
2,000 bbls, Kentmere, Calcutta
MIN'L COLZA—10 bbls, Mackinaw, London
NEATSFOOT—10 bbls, Nordkyn, Rotterdam
OLEO—374 tcs, Nordkyn, Rotterdam
316 tcs, Haxby, Rotterdam
PAINT—65 pkgs, Lida Fowler, Old Providence
SOAP—2,000 bxs, Rhynland, Liverpool
100 bxs, Lida Fowler, Old Providence
75 pcs, Sutherland, Havana
STARCH—150 bgs, Switzerland, Antwerp
2,100 bxs, 150 bgs, Nordkyn, Rotterdam
1,100 bgs, Blaamanden, Rotterdam
1,400 bxs, Haxby, Rotterdam
TALLOW—855 tcs, Nordkyn, Rotterdam
300 tcs, Rhynland, Liverpool
60 tcs, Haxby, Rotterdam
WAX PAR—580 cs, 420 bgs & 20 bbls, Switzerland, Ant
80 cs, Rhynland, Liverpool
ZINC DROSS—140 bbls, Mackinaw, London

Baltimore Exports.

CANDLES—1 bx, Elliot, Tarpun Bay
COPPER, SULPHATE—22 bbls, Bosna, H'b'g
GLUCOSE—281,082 lbs, Tremont, London
911,423 lbs, Quernmore, Liverpool
GRAPE SUGAR—44,800 lbs, Tremont, London
257,600 lbs, Quernmore, Liverpool
25,600 lbs, Bothania, Hamburg
GREASE—43,424 lbs, Quernmore, Liverpool
OIL CAKE—114,670 lbs, Indrani, Glasgow
1,199,488 lbs, Bosnia, Hamburg
1,902,658 lbs, Quernmore, Liverpool
CORN—500 lbs, Bosnia, Hamburg
COTTONSEED—13,000 gls, Bosnia, H'b'g
200 bbls, Tabasco, Rotterdam
LINSEED—4 bbls, Mabel Darling, Tarpun Bay
25 gals, John A Matheson, Old Providence
LUB—8,000 gls, Indrani, Glasgow
6,301 gls, Quernmore, Liverpool
OLEO—38,800 lbs, Bosnia, Hamburg
90,000 lbs, Tabasco, Rotterdam
PAINT—100 lbs, Maggie A Philips, Gregorytown
ROSIN—1,000 bbls, Tremont, London
86 bbls, Julia Rollins, Rio Janeiro
SOAP—720 lbs, Elliot, Tarpun Bay
40 bxs, John A Matheson, Old Providence
4 bxs, Mabel Darling, Tarpun Bay
STARCH—112,000 lbs, Indrani, Glasgow
TALLOW—22,390 lbs, Indrani, Glasgow
33,200 lbs, Bosnia, Hamburg
67,786 lbs, Quernmore, Liverpool
29,799 lbs, Forest Dale, Newcastle
WAX, PAR—134,380 lbs, Indrani, Glasgow
154,158 lbs, Quernmore, Liverpool
WHITE LEAD—1,200 lbs, Mabel Darling, Tarpun Bay

Savannah Exports.

OIL, ROSIN—65 bbls, $375, S P Shotter & Co, Juletrae, Hamburg
ROSIN—1,250 bbls, $3,175, S P Shotter & Co, Juletrae, Hamburg
5,000 bbls, $9,515, Paterson, D & Co, Patagonia, London
TURPENTINE—2,574 cks, $44,050, S P Shotter & Co, Juletrae, Hamburg
2,064 cks, $38,102, Paterson, D & Co, Patagonia, London

Newport News Exports.

BARK EXTRACT—45,431 lbs, $1,360, Rappahannock, Liverpool
112,000 lbs, $2,240, Pak Ling, Hamburg
OCHER—71,000 lbs, $2,130, Pak Ling, H'b'g
OIL, CAKE—336,110 lbs, $3,000, Pak Ling, Hamburg
852,419 lbs, $8,524, St Enoch, Antwerp
COTTONSEED—65,000 gls, $13,000, Pak Ling, Hamburg
7,500 gls, $1,950, Rappahannock, L'pool
RED—41,600 gls, $4,160, St Enoch, Antwerp
PLUMBAGO—60,000 lbs, $6,000, Pak Ling, Hamburg
STARCH—379,400 lbs, $7,588, St Enoch, Ant

New Orleans Exports.

CANDLES—10 bxs, Sunniva, Bluefields
13 bxs, Stillwater, Porto Cortez
COTTONSEED CAKE—700 bgs, Louisiana, Copenhagen
1,805 bgs, Barden Tower, Glasgow
2,880 bgs, Mexican, Liverpool
MEAL—23 bgs, Louisiana, Copenhagen
7,498 bgs, Handel, Liverpool
4,480 bgs, Barden Tower, Glasgow
340 bgs, Mexican, Liverpool
OIL—5 bbls, Sunniva, Bluefields
COTTONSEED—750 bbls, Louisiana, Copenhagen
800 bbls, Handel, Liverpool
29 bbls, Clinton, Havana
2,925 bbls, Styria, Trieste
1,355 bbls, Barden Tower, Glasgow
PAINT—82 pkgs, Sunniva, Bluefields
PETROLEUM—38 bbls, 300 cs, Sunniva, Bluefields
PHOSPHATE—2,000 tons, Styria, Venice
ROSIN—80 bbls, Olympia, Port Limon
12 bbls, Stillwater, Porto Cortez
SOAP—1,020 bbls, Handel, Liverpool
36 bxs, Stillwater, Porto Cortez
379 bbls, Barden Tower, Glasgow
STEARINE—66 bgs, Hispania, Port Limon
TALLOW—80 bbls, Olympia, Port Limon
14 bbls, Stillwater, Porto Cortez
TURPENTINE—2 bbls, Sunniva, Bluefields
WHITE LEAD—100 kgs, Sunniva, Bluefields

Galveston Exports.

COTTONSEED MEAL—866 bgs, $650, Middleham Castle, Havre

San Francisco Exports.

ACID—18 cbys, Falls of Clyde, Hilo
27 cbys, Curacao, Mexico
ALCOHOL—325 bbls, China, Japan
AMMONIA—3 cyls, Curacao, Mexico
10 tanks, China, Manila
BORAX—116 lbs, Curacao, Mexico
BRIMSTONE—110 lbs, Curacao, Mexico
CLAY—25 bbls, S G Wilder, Honolulu
FERTILIZER—100 tons, S N Castle, Honolulu
464 tons, Falls of Clyde, Hilo
101 tons, S G Wilder, Honolulu
GLUCOSE—5 bbls, S N Castle, Honolulu
GLUE—2 bbls, Curacao, Mexico
1 pkg, S G Wilder, Honolulu
GUANO—12 tons, Martha Davis, Honolulu
LEAD—2,072 pigs, China, Japan
LITHARGE—1 kg, Curacao, Mexico
OIL—46 bbls, 10 cs, S N Castle, Honolulu
24 cs, Falls of Clyde, Hilo
30 bbls, 31 cs, Mary Dodge, Kahului
70 cs, Curacao, Mexico
10 cs, City of Sydney, Central America
16 bbls, 30 cs, S G Wilder, Honolulu
LUB—10 bbls, City of Sydney, Central America
21 bbls, Martha Davis, Honolulu
PAINT—17 pkgs, Queen, Victoria
149 cs, Curacao, Mexico
1 cs, City of Sydney, Central America
38 cs, S G Wilder, Honolulu
PITCH—6 bbls, Curacao, Mexico
QUICKSILVER—330 flasks, Curacao, Mexico
ROSIN—4 bbls, Curacao, Mexico
56 bbls, City of Sydney, Central America
SOAP—53 bxs, Falls of Clyde, Hilo
68 bxs, Mary Dodge, Kahului
1,000 bxs, City of Sydney, Panama
7 bxs, S G Wilder, Honolulu
350 bxs, Martha Davis, Honolulu
SODA, CAUSTIC—6,000 lbs, Curacao, Mexico
SPICES—899 lbs, Curacao, Mexico
STARCH—244 lbs, Falls of Clyde, Hilo
448 lbs, Mary Dodge, Kahului
858 lbs, Curacao, Mexico
760 lbs, City of Sydney, Central America
TALLOW—28,553 lbs, Curacao, Mexico
63,450 lbs, City of Sydney, Central America
TAR—21 bbls, Curacao, Mexico
8 bbls, City of Sydney, Central America
TURPENTINE—12 cs, Falls of Clyde, Hilo
10 cs, Mary Dodge, Kahului
2 cs, Curacao, Mexico
3 cs, City of Sydney, Central America
VARNISH—13 cs, Falls of Clyde, Hilo
4 cs, Mary Dodge, Kahului
2 cs, City of Sydney, Central America
4 cs, S G Wilder, Honolulu
WHITE LEAD—30 kegs, Falls of Clyde, Hilo
10 kegs, Curacao, Mexico
20 kegs, City of Sydney, Central America
150 kegs, S G Wilder, Honolulu

To New York.

GLUE—40 bgs, City of Sydney
OIL, FISH—139 bbls, City of Sydney
OLEINE—90 bbls, City of Sydney

NEW YORK DOMESTIC RECEIPTS.

Week ending June 15.

ALCOHOL—65 bbls, J L Hasbrouck, D, L & W R R
WOOD—185 bbls, W S Gray, L V R R
BARK—400 bgs, export, O D S S L
25 bgs, order, O D S S L
BEESWAX—4 bbls, Sabel Bros, New Orleans
1 bbl, order, Galveston
4 bbls, order, O D S S L
1 bx, order, H R R R
BORAX—1,500 tons, order, Galveston
3,210 bgs, Pacific C B Co, Galveston
CLAY—262 bgs, Chesebrough Mfg Co, Jacksonville
326 bgs, Owl Comm Co, Jacksonville
COPPER SULPHATE—146 bbls, order, Balto Trans Co
COTTONSEED, MEAL—10 bgs, order, Wilmington
FLAXSEED—1 car, Nat Lead Co, L V R R
25 bbls, T R Bagot, H R R R
GLUCOSE—660 bbls, order, O D S S L
124 bbls, Standard Ref Co, H R R R
110 bbls, A Essing, E R R
50 bbls, W D Hoag & Co, L V R R
50 bbls, Hawley & H, E R R
50 bbls, D Seals & Co, L V R R
50 bbls, Crandall & G Co, L V R R
50 bbls, United Conf Ass'n, L V R R
50 bbls, Standard Ref Co, L V R R
60 bbls, Crandal & G Co, P R R
47 bbls, H Heide, P R R
GREASE—56 bbls, order, P R R
210 tcs, E S Kuh, E R R
342 tcs, order, C R R of N J
25 bbls, Manhattan Oil Co, P R R
20 bbls, N Y Lub Oil Co, P R R
60 tcs, export, H R R R
75 bbls, Mariental & Son, P R R
60 bbls, export, E R R
741 bbls, E S Kuh, D, L & W R R
HIGH WINES—80 bbls, Lanman & K, P R R
335 bbls, Nat Dist Co, P R R
65 bbls, Luyties Bros, L V R R
200 bbls, Am Dist Co, D, L & W R R
65 bbls, Cook & B Co, P R R
75 bbls, Kraus & Bros, P R R
65 bbls, J A Webb & Son, P R R
30 bbls, E Heller & Co, L V R R
130 bbls, J A Webb & Son, D, L & W R R
LAMP BLACK—107 bbls, E P Earle, P R R
LEAD—1,120 pigs, Nat Lead Co, New Orleans
1,853 pigs, Behr & S, New Orleans
4,000 pigs, M Guggenheimer & Sons, New Orleans
4,200 pigs, Inter Metal Co, New Orleans
6,864 pigs, order, New Orleans
402 pigs, Phelps, D & Co, H R R R
1,200 pigs, order, H R R R
4,650 pigs, Behr & S, Galveston
465 pigs, order, Galveston
MILK SUGAR—174 bbls, Stallman & F, E R R
OIL—45 bbls, J C Long, E R R
CAKE—3,750 bgs, Munn & J, D, L & W R R
208 bags, export, P R R
355 bags, J & C Moore, E R R
124 bags, Am Lin Co, E R R
182 bags, export, E R R
CORN—60 bbls, export, P R R
COTTONSEED—100 bbls, E Meyers & Co, Charleston
41 bbls, order, O D S S L
1,289 bbl, order, Savannah
1,000 bbls, export, Charleston
LARD—75 bbls, Davis Oil Co, P R R
60 bbls, Davis Oil Co, E R R
LINSEED—60 bbls, Macy & D, H R R R
55 bbls, T R Bagot, H R R R
60 bbls, Standard Var Co, D, L & W R R
8 cars, 60 bbls, Dean L S Oil, P R R
60 bbls, Devoe & R, D, L & W R R
60 bbls, H W Johns Mfg Co, D, L & W R R
60 bbls, J G Newcomb, D, L & W R R
60 bbls, J G Newcomb, W S R R
60 bbls, Macy & D, E R R
63 bbls, A L Clements, P R R
LUB—225 bbls, N Y Lub Oil Co, H R R R
20 bbls, order, C R R of N J
MEAL—800 bgs, I H Reed & Co, P R R
235 bbls, order, E R R
OLEO—210 tcs, export, P R R
2,500 tcs, export, E R R
735 tcs, export, W S R R
100 tcs, export, L V R R
570 tcs, export, D, L & W R R
ROSIN—123 bbls, order, Savannah
PITCH—28 bbls, order, Savannah
5 bbls, order, Wilmington
POTASH—24 cks, order, P R R
1 ck, order, Balto Trans Co
8 cks, order, H R R R
ROSIN—343 bbls, order, O D S S L
5,509 bbls, order, Savannah
1,405 bbls, Baily & M, Jacksonville
106 bbls, Peacock & H Co, Jacksonville
148 bbls, Baily & M, Brunswick
690 bbls, Paterson, D & Co, Brunswick
400 bbls, export, Brunswick
446 bbls, Tolar, H & Co, Georgetown
335 bbls, L Breslauer, Georgetown
352 bbls, Baily & M, Georgetown
18 bbls, Pitts Bros & Co, Jacksonville
63 bbls, Baily & M, Charleston
SOAP STOCK—150 bbls, Oil Seeds Pressing Co, New Orleans
150 bbls, order, Savannah
SODA ASH—128 bgs, E Morgan's Sons' Co, H R R R
100 bgs, A Klipstein & Co, H R R R
150 bxs, order, O D S S L
375 bgs, B T Babbitt, H R R R
100 bgs, Welch & W, H R R R
160 bgs, 70 bbls, J L Weller, H R R R
135 bgs, J Pyle & Sons, H R R R
CAUSTIC—41 dms, Champion Chem Wks, H R R R
SPELTER—662 slabs, Amer Metal Co, Galveston
SPONGE—31 bls, order, Savannah
19 bbls, Vollman Sponge Co, Key West
96 bls, Lebess Sponge Co, Key West
23 bls, A Isaacs & Co, Key West
37 bls, Lasker & B, Key West
15 bls, order, Key West
STARCH—125 cs, 5 bbls, order, Balto Trans Co
250 bbls, F Rose & Co, H R R R
700 bxs, J Randles, H R R R
25 bbls, 1,900 bxs, Oswego Starch Co, H R R R
2,100 bxs, Duryea & Co, P R R
25 bbls, order, H R R R
600 cs, Carhart Bros, E R R
125 bbls, R C Williams & Co, P R R
STEARINE—550 tcs, S & S Beef Co, D, L & W R R
150 tcs, order, D, L & W R R
TALLOW—62 tcs, order, O D S S L
18 tcs, Welch & W, E R R
15 bbls, 75 tcs, W D Vandenhove & Co, W S R R
25 bbls, A L Knight, P R R
130 tcs, order, D, L & W R R
64 pkgs, order, Savannah
65 tcs, export, E R R
32 bbls, Colgate & Co, L V R R
TAR—74 bbls, order, O D S S L
50 bbls, Tolar H & Co, Georgetown
28 bbls, Baily & M, Georgetown
50 bbls, H Louderbaugh, Wilmington
20 bbls, F W Blossom, Wilmington
5 bbls, J A Blanchard, Wilmington
115 bbls, order, Wilmington
TURPENTINE—182 bbls, order, O D S S L
1,014 bbls, order, Savannah
437 bbls, Baily & M, Jacksonville
100 bbls, Standard N S Co, Jacksonville
139 bbls, Peacock & H Co, Jacksonville
40 bbls, Paterson D & Co, Charleston
17 bbls, F S Clark, Charleston
32 bbls, Baily & M, Brunswick
725 bbls, Paterson D & Co, Brunswick
500 bbls, Pratt Wks, Brunswick
272 bbls, Tolar H & Co, Georgetown
98 bbls, L Breslauer, Georgetown
106 bbls, Baily & M, Georgetown
23 bbls, Baily & M, Wilmington
17 bbls, Tolar H & Co, Wilmington
100 bbls, Paterson, D & Co, Wilmington
106 bbls, M W Larendon, Wilmington
22 bbls, W J Keenan, Wilmington
184 bbls, order, Wilmington
102 bbls, F W Blossom, Wilmington
25 bbls, Pitts Bros & Co, Jacksonville
1 bbls, order, Jacksonville
CRUDE—10 bbls, H Louderbaugh, Wilmington
10 bbls, order, Wilmington

Total Domestic Receipts.

At New York for week ending June 15, 1899.			
Alcohl	bbls	65	2,233
Beeswax	pkgs	10	282
Boneblack	bgs	223	9,544
Borax	bgs	33,210	121,275
Cottonseed	bgs	....	2,157
Ashes	bgs	....	3,823
Cake	bgs	....	....
Hulls	bgs	....	240
Meal	bgs	10	39,712
Flaxseed	bu	605	203,667
Glucose	bbls	1,301	59,228
Glue	pkgs	....	621
Grease	pkgs	989	25,699
Highwines	bbls	1,105	38,626
Lead	pigs	24,844	424,639
Mustard seed	bgs	....	1,000
Oil cake	bgs	4,619	131,647
Cottonseed	bbls	2,430	181,936
Fish	bbls	....	1,250
Lard	bbls	135	1,644
Lubricating	bbls	245	10,451
Oleo stock	tcs	4,115	77,982
Pitch	bbls	33	2,931
Quicksilver	flks	....	6,307
Rosin	bbls	9,806	171,364
Soap stock	bbls	300	13,457
Spelter	pcs	962	85,559
Sponges	bls	221	2,424
Starch	pkgs	5,855	81,066
Stearine	pkgs	700	7,289
Sumac	bgs	....	1,406
Tallow	pkgs	486	29,206
Tar	bbls	351	21,808
Turpentine, crude	bbls	20	682
Spirits	bbls	4,242	50,708

Boston Domestic Receipts.

Week ending June 15.

COTTONSEED MEAL—7 tons.
GREASE—450 bbls.
TALLOW—226 bbls, 130 tcs

Baltimore Domestic Receipts.

Week ending June 15.

CLAY—36 cks, Savannah
OIL, ROSIN—63 bbls, Savannah
PHOSPHATE—2,000 tons, Charleston
PITCH—76 bbls, Savannah
ROSIN—2,430 bbls, Savannah
TURPENTINE—50 bbls, Savannah

Charleston Domestic Receipts.

Week ending June 14.

ROSIN—72 bbls
TURPENTINE—24 cks

Savannah Domestic Receipts.

Week ending June 14.

OIL, COTTONSEED—5 bbls
ROSIN—3,795 bbls
TURPENTINE—951 bbls

MERCK & CO.

Cocaine Muriate Large and Small Crystals.
Salicin, U. S. P.
Formaldehyde.
Creolin—Pearson.

University Place and Eighth Street, **NEW YORK.** Down-Town Office, 100 William Street.

Wilmington Domestic Receipts.

Week ending June 14.

ROSIN—1,835 bbls
TAR—527 bbls
TURPENTINE—684 cks
CRUDE—377 bbls

New Orleans Domestic Receipts.

Week ending June 14.

ACID, BORACIC—215 bbls
COTTONSEED—17,824 bgs
HULLS—1 car
MEAL—12,908 bgs
GLUCOSE—1 car
LEAD—16,412 pigs
OIL—100 bbls, 4 cars
CAKE—3 cars, 500 tons
COTTONSEED—9 cars
PAINT—1 car
PITCH—32 bbls
ROSIN—5 cars, 902 bbls
SOAP—1,140 bxs, 1 car
STARCH—1,900 bxs, 1 car
TAR—2 bbls, 1 car
TURPENTINE—444 bbls, 1 car

San Francisco Domestic Receipts.

Week ending June 10.

GREASE—11 bbls, 1 cs, via San Jose
50 cs, E B C & Co, via San Jose
OIL—6 bbls, 1 cs, via San Jose
6 bbls, Dolliver Bros, via San Jose
11 cs, Smith & Young, via San Jose
LUB—440 bbls, 6 cs, via San Jose
PAINT—5 bbls, 5 cks, 2 cs, F Co, via San Jose
PUMICE—2 bbls, F Co, via San Jose
SOAP—500 bxs, via San Jose
SODA, ASH—5 cks, Mack & Co, via Vancouver
STARCH—310 bxs, 50 bbls, Haslett, W H Co, via Vancouver
TAR—2 cs, Geo Lawrence & Co, via San Jose
VARNISH—1 bbl, via San Jose

TOTAL IMPORTS AT NEW YORK.

In the following table we give the total imports, in packages, unless otherwise specified, and their values at the port of New York, for the week ending June 16, 1899:

	Quantity.	Value.
Bottles	....	$1,897
Glass, plate	38	4,703
Glass, window	643	2,293
L. G. plates	106	10,525
Acid, benzoic	105	4,367
Acid, carbolic	25	288
Acid, citric	652	2,058
Acid, oxalic	40	1,875
Acid, picric	50	2,303
Acid, salicylic	60	2,267
Acid, all other	48	2,887
Aniline colors	1,334	75,866
Aniline salt	168	5,882
Ammonia, muriate of	96	3,410
Ammonia, salt	15	464
Argols	307	18,306
Albumen	14	814
Alizarine	212	10,112
Asphalt	....	5,658
Balsam Peru	2	380
Balsam tolu	70	1,173
Balsam, all other	57	241
Barytes, other	22	240
Bay rum	55	1,383
Bay leaves	13	245
Bleach powder	359	3,479
Bronze powder	....	7,191
Butter, cocoa	17	230
Chalk	....	1,200
Cantharides	5	200
Chem. salts	208	8,051
Chicory	50	308
Citrate of lime	111	12,841
Cinchonidia	34	4,964
Cobalt	54	9,017
Chlo. Hydrat.	3	195
Colocynth	7	117
Dragons' blood	4	348
Dextrine	250	1,375
Divi divi	45	28
Dyewood, extract of	110	4,683
Ergot	100	3,846
Fish sounds	7	1,215
Flowers	7	57
Flowers, cham.	20	270
Flowers, all other	40	492
Fuller's earth	298	200
Gelatine	191	6,481
Glycerine	224	20,834
Gum, arabic	169	4,559
Gum, chicle	718	27,510
Gum, domat	100	1,714
Gum, kowrie	207	4,344
Gum, shellac	718	27,510
Gum, senegal	130	3,831
Gum, tragacanth	219	16,933
Gum, all other	2	151
Glue	314	10,214
Indigo	6	918
Manna	20	432
Manganese	23	534
Madder	5	328
Magnesium	2	482
Magnesia	30	536
Manure salt	....	11,559
Mica	24	1,608
Morphine	2	2,830
Nut galls	114	1,582
Nut galls, extract of	10	703
Nux vomica	1,207	4,030
Orchilla, liq.	5	229
Oxide zinc	56	1,424
Oil, aniline	38	4,071
Oil, almonds	8	409
Oil, anise	51	4,480
Oil, bergamot	114	5,281
Oil, castor	2	16
Oil, caraway	2	90
Oil, cassia	5	370
Oil, cod	2	20
Oil, cocoanut	683	17,154
Oil, creosote	350	1,503
Oil, fusel	72	2,471
Oil, geranium	3	646
Oil, juniper	1	43
Oil, lavender	29	3,576
Oil, lemon	256	4,772
Oil, myrbane	35	1,720
Oil, neroli	1	62
Oil, origanum	5	140
Oil, orange	5	153
Oil, olive	3,689	20,370
Oil, rose	39	2,623
Oil, rosemary	1	1,507
Oil, sesame	10	355
Oil, sandalwood	4	414
Oil, tanners'	101	547
Oil, thyme	4	370
Oil, other essences	22	1,310
Oil, all other	66	1,554
Opium	95	28,784
Paints (unspecified)	....	9,197
Paints, Berlin blue	11	541
Paints, blanc fixe	49	452
Paints, chr. yellow	6	260
Paints, colcothar	76	543
Paints, drop black	90	290
Paints, iron oxide	226	2,217
Paints, lithophone	100	934
Paints, ocher	111	253
Paints, orange mineral	34	1,524
Paints, red lead	10	340
Paints, umber	25	160
Paints, venetian red	95	209
Paints, vermilion	2	152
Pitch	29	574
Pitch, chlor.	500	3,826
Potash, carb.	22	512
Potassium, cyanide	305	12,190
Potato starch	350	1,834
Quinine	309	51,825
Reg. antimony	68	3,470
Root Colombo	104	381
Root, ipecac	1	377
Root, licorice	91	577
Root, orris	75	401
Root, sarsaparilla	36	536
Root, all other	27	301
Saffron, extract of	1	1,002
Saltpeter	149	773
Soda, bicarb.	100	105
Soda, carb.	56	162
Soda, caustic	50	425
Soda, chlor.	200	1,601
Soda, hypo.	220	417
Soda, sal	140	304
Soda, silicate	50	224
Sponges	706	16,500
Sulphur ore	....	25,324
Sumac	212	581
Sumac, extract of	93	1,671
Talc	300	458
Turmeric	560	2,800
Ultramarine	33	1,320
Vanilline	1	329
Vanilla beans	26	37,798
Varnish	33	1,433
Verdigris	6	442
Other	....	54,081
Bristles	107	9,725
Hides (dressed)	99	41,072
Hides (undressed)	....	486,113
Horn bones	....	5,959
Horn strips	4	420
Leather, mfr. of	28	3,354
Rennets	14	3,918
Alcohol	1	4
Bismuth	20	4,633
Dutch metal	40	3,758
Lead, pigs	82,017	926,688
Metal leaf	5	546
Cassia	113	1,313
Cinnamon	5	19
Chillies	357	3,031
Ginger	923	6,864
Mustard	15	24
Pepper	1,409	18,133
Pimento	514	4,669
Corkwood	....	36,908
Fustic	....	4,721
Logwood	601	3,469
Clay	....	4,061
Carbon	....	10
Candles	....	256
Cork	....	3,043
Portland cement	9,179	11,122
Perfumery	168	15,810
Seed, annato	12	38
Seed, anise	8	97
Seed, canary	2,822	7,909
Seed, caraway	420	1,677
Seed, cardamom	1	50
Seed, cummin	4	20
Seed, hemp	650	3,390
Seed, rape	9	31
Seed, other	....	3,095
Soap, castile	428	1,049
Soap, all other	86	7,573
Stone, pumice	....	229
Wax	....	2,284
Whalebone	....	5

GOODS ON THE WAY TO THE UNITED STATES BY SAIL.

Ceylon.

TO NEW YORK.

Isaac Reed, 9,000 bls gambier.
Paramita, 10,000 bls gambier.
Maria, 11,000 bls gambier
Berlin, 8,000 bls gambier

TO THE UNITED STATES.

Condor (ss), 8,400 bgs nitrate soda.
Bandaneira, 22,000 bgs nitrate soda.
Glenclova, 28,000 bgs nitrate soda.
Eskasoni, 22,000 bgs nitrate soda.
Lancelot (ss), 30,000 bgs nitrate soda.
Holliswood, 11,000 bgs nitrate soda.
Capac (ss), 20,000 bgs nitrate soda.
Coya (ss), 20,000 bgs nitrate soda.
Annasona, 18,000 bgs nitrate soda.
Craigsland, 14,600 bgs nitrate soda.
Juanita North (ss), 45,000 bgs nitrate soda.
Queen Margaret (ss), 20,000 bgs nitrate soda.
Cacique (ss), 20,000 bgs nitrate soda.
Brynhilda, 16,000 bgs nitrate soda.
Condor (ss), 20,000 bgs nitrate soda.
Nellie Troop, 16,200 bgs nitrate soda.
City of Glasgow, 13,300 bgs nitrate soda.
Sahara (ss), 43,000 bgs nitrate soda.
Mohican (ss), 25,000 bgs nitrate soda.
Centurion, 20,000 bgs nitrate soda.
Garibaldi, 16,000 bgs nitrate soda.

RECORD OF VESSELS.

Port and Name.	Sailed.
Singapore.	
Isaac Reed	Feb. 9
Paramita	March 11.
Maria	May 20.
Berlin.	
W. C. S. America.	
Bandaneira	Due June.
Condor (ss)	Due June.
Glenclova	Due July.
Eskasoni	Due August.
City of Glasgow	Due July.
Nellie Troop	Due July.
Lancelot (ss)	Due August.
Holliswood	Due September.
Capac (ss)	Due September.
Coya (ss)	Due September.
Annasona	Due June.
Craigsland	Due July.
Juanita North (ss)	Due August.
Queen Margaret (ss)	Due September.
Cacique (ss)	Due October.
Brynhilda	Due November.
Condor (ss)	Due December.
Sahara (ss)	Due July.
Mohican (ss)	Due September.
Centurion	Due October.
Garibaldi	Due February, 1900.

Cable Address, "LYCURGIS," New York

GENERAL CHEMICAL CO.

MANUFACTURING CHEMISTS

HIGH GRADE

Sulphuric, Muriatic, Nitric, Acetic

ACIDS

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HIGH TEST SALT CAKE, For Glass Manufacturers.

CALCINED AND NEUTRAL GLAUBER'S SALT. BLUE VITRIOL. TIN CRYSTALS.
BISULPHATE OF SODA. MURIATES OF TIN, IRON AND ANTIMONY, Etc., Etc.

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CHLORIDE MANGANESE, CARBONATE OF POTASH, HYPOSULPHITE OF SODA
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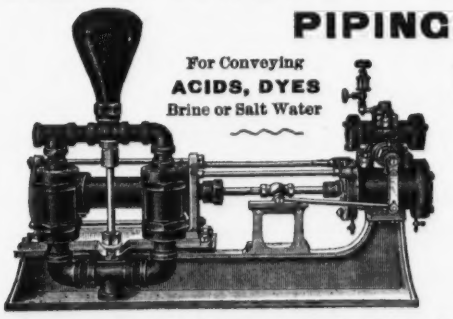

FAUCETS, DIPPERS, PAILS, Etc.
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CHEMICAL MARKET.

NOTE—Our prices are for large lots except when otherwise specified, and buyers of small quantities must expect to pay an advance on these figures. Complete prices current will be found on pages 36 and 37.

Saturday Evening, June 17, 1899.

The market continues firm, with tendency to a higher range of values, especially for alkali and caustic soda, both of which are in light stock for prompt delivery, and meeting also with an increased demand for forward delivery. Sal soda, domestic, has been rather quiet since the advance noted in our last. There have been free arrivals of brimstone since our last, which has relieved the market to some extent. Nitrate of soda is gradually working upward, both for spot and forward shipments. Chlorate of potash is steady, and the same may be said of the other potashes. Arsenic, under pressure to sell by some of the paris green makers, prices are a shade easier. Acids of all descriptions are in better request, and prices generally are well sustained. The other light chemicals show few changes, as detailed below. In their letter Messrs. J. P. Brunner & Co., of Liverpool, say: "While there is no special activity as regards new business in heavy chemicals, makers are kept fairly busy on contract deliveries, and stocks are in moderate compass all round, with consequent firmness in quotations. Soda ash is selling at varying prices, according to destination, and maximum range for tierces may be called about as follows: Leblanc ash, 48 per cent., £4 5s. to £4 10s. per ton; 58 per cent., £4 10s. to £4 15s. per ton; ammoni. ash, 48 per cent., £4 to £4 5s. per ton; 58 per cent., £4 5s. to £4 10s. per ton, net cash; bags 5s. per ton under price for tierces. Soda crystals in steady request, and for barrels £2 17s. 6d., less 5 per cent., is generally quoted, with special quotations for certain favored markets. Bags 7s. per ton under price for barrels. Caustic soda in moderate supply, especially for unbarred makes, and prices are firm, as follows: Sixty per cent., £6; 70 per cent., £7; 74 per cent., £7 10s.; 76 per cent., £7 15s. per ton, net cash. Bleaching powder quiet at £4 15s. to £5 per ton, net cash, for hardwood packages. Chlorate of potash in fair demand at 3½d. to 3⅝d. per lb. for crystals and 3⅝d. to 3¾d. per lb. for powdered, as to quantity. Bicarb. soda is moving off fairly at varying prices, according to destination, ranging from £5 5s. to £6 15s. per ton, less 2½ per cent. for the finest quality, in cwt. kegs, with usual allowances for larger packages. Sulphate of ammonia, although still scarce, has weakened a little, and nearest spot values are now about £12 15s. to £12 17s. 6d. per ton, less 2 per cent. for good gray 24 to 25 per cent. in double bags, f. o. b. here. Nitrate of soda is selling in a quiet way at from £8 5s. to £8 10s. per ton, less 2½ per cent. for double bags f. o. b. here, as to quality and quantity."

Heavy Chemicals.

ALKALI.—The market for domestic high test continues strong, with an upward tendency, especially for prompt delivery, as stocks are not only in small compass, but are daily growing less, more particularly in first hands. The bulk of the business for prompt delivery is being done by second hands in this section, at prices ranging from 85@90c., as to make, quantity and seller. For forward delivery there is more demand, and considerable business has been done for next fire at 70c. for bags, f. o. b. works. Makers, however, are very conservative about going forward at this price, except in special cases. There is more demand for B. M., high test, and a fair business is reported at 80@85c., as to quantity, and date of delivery.

BICARB. SODA.—During the past few days there has been an improved demand, both for export and for home consumption. Buyers evidently are under the impression that prices may be raised to cover the enhanced cost of alkali. Prices remain firm at 1¼@1¼c. for ordinary, and 3¼@3½c. f. o. b. usual terms for extra grades.

CRYSTAL CARBONATE.—The hot weather of the past week has stimulated trading in this article. Several sales are reported for nearby and forward arrival at 1.60c. for car lots, and for store parcels at 1.70@1.75c. as to the size of the order.

CAUSTIC SODA.—Stocks of domestic high test are still light for prompt delivery in makers' hands, and what available stock there is ready for delivery commands 1.50@1.55c. f. o. b. works. There has been more demand for forward delivery and considerable business has been done at 1.45c. f. o. b. works. In this section the jobbing demand is unusually good, and is satisfied at prices ranging from 1.60@1.75c., according to test, make and seller. Powdered, 98 per cent., is doing better and prices generally are firmer, and may be quoted at 2.90@3c., as to test, make and quantity.

SAL SODA.—Domestic makers in this section all report an increased demand both for prompt and for delivery over the summer months. For the present they are quoting 60c. f. o. b., usual terms. There has also been more demand for "Arm and Hammer" concentrated, and a fair business is reported at 1.35@1.65c. f. o. b., usual terms. Foreign is also in better request, and several sales are reported for June-July shipment at 62½c.

MONOHYDRATE CRYSTALS.—During the past week there has been an improved demand, both for spot and forward delivery at 1.35@1.65c. and for "Snowflake" at 1¼c. f. o. b. works, usual terms.

BLEACHING POWDER.—The warm weather of the past week has increased the demand for prime high test, Liverpool makes, and several sales are reported at 1.42½@1.50c., as to test, make and quantity. Outside makes are also in better request, and are jobbing at 1.25@1.35c., according to test, make and seller.

Acids.

ACETIC.—There is a good consuming demand from the mills, both for prompt and forward delivery. Otherwise trade is slow, especially for paris green. Prices remain steady at 1½c. and upward, as to make and delivery point.

MURIATIC.—Contract deliveries still show an increase over last week, though new business is not as brisk as could be desired. Values remain unchanged at 1.15c. and upward, as to strength and quantity.

TARTARIC.—Considerable stock is daily going into channels for consumption, all of which have been increased since the advent of hot weather. Prices remain firm at 31½@32c. for crystals and 32@32½. for powdered, usual terms.

SULPHURIC.—No change in the situation, except there is a daily increase in the deliveries to the soda water makers. Beyond this trade is of its usual propor-

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Tin Crystals, Turpentine, All grades of Rosin, Tar and Pitch, Gum Thus
BEST GREEN OLIVE OIL FOOTS, Quality Guaranteed
Tallow, Grease and Lard
PROMPT ATTENTION GIVEN TO ALL ORDERS

tions. Prices remain unchanged, as named by the combine, at 1.10c. and upward for 66 degrees, as to the size of the order.

Miscellaneous Chemicals.

ACETATE OF LIME.—The usual home demand is reported, with a fair amount going forward for export. Values for the present remain steady at .80@.85c. for brown and 1.25@130c. for gray, as to quantity and delivery point.

ALUM.—Contract deliveries in the paper trade show an increase so far this month, as compared with last month. Prices remain steady at 1.65@1.75c. for lump and 1.75@1.85c. for ground, as to quantity and delivery point. No change in sulphate of alumnia, except that the demand is gradually on the increase at prices ranging from 1.25@1.50c., as to quantity and delivery point.

ARSENIC.—The spot market is a shade easier, from the fact that some of the paris green makers are selling their surplus stocks at 4⅛@4¼c., as to make and seller. Reguar holders, however, are declining to sell under 4⅛@4⅜c., as to brand and quantity. Red is quiet but firm at 7¾@8½c., as to quality and packing.

BRIMSTONE.—The market is somewhat relieved by the free arrivals during the week. Small sales are being made at $21.50@22. Shipments are more or less unsettled, owing to reports that the foreign syndicate may be dissolved at any moment. Nearby parcels are quoted at $21, and later arrivals at $20.50@20.75 per ton, as to quantity and seller.

BLUE VITRIOL.—Free selling on the part of speculators and some of the paris green makers, prices have given way and may be quoted at 5⅝@5½c., as to quantity. Makers continue their previous quotations of 5¾c. for car lots and 6c. for jobbing parcels.

CHLORATE OF POTASH.—There is a good jobbing demand for spot parcels at 9⅜@9½c. for crystals. There is still a scarcity of powdered for prompt delivery, and prices are held steady at 9¾c. for domestic, and 10c. and upward for English, as to the size of the order.

CHLORATE OF SODA.—The usual jobbing demand prevails for spot and nearby parcels at 10@10¼c., as to make and seller.

CAUSTIC POTASH.—Rather more inquiry the past few days, both for prompt and nearby delivery. Prices remain steady at 4@5¼c., as to test and quantity.

CARBONATE OF POTASH.—During the past few days there has been considerable business done for July forward, but details have not been made public. For the present we quote 3@4¼c., as to test, quantity and date of delivery.

CREAM OF TARTAR.—No change in the situation. Makers, however, all report the usual consuming demand, which is satisfied at 23½@24c. for powdered, usual terms.

GLAUBER'S SALT.—Trade is better, both for prompt and forward delivery. Prices remain steady, as named by the combine, at 65@85c., as to the size of the order and delivery point.

NITRATE OF SODA.—Under free buying the spot market has been cleaned up, and at the close 1.65@1.66c. was lowest quoted. Shipments are also firmer, and may be quoted at 1.60@1.62½c., as to date of arrival.

SAL AMMONIAC.—Better demand is reported for white grain at 5¾@6c. Rough is quiet but steady at 5¾c., and lump at 8¼c.

SUGAR OF LEAD.—During the past few days there has been an increase in contract deliveries to the various consumers. There was some talk of prices being advanced, but so far makers have made no change and continue their quotations of 7½@7¾c. for white crystals and 5¼@5½c. for brown, less usual discount terms.

SALTPETER.—The usual jobbing demand prevails for spot goods at 3½@3⅝c., as to the size of the order. Refined is in better request at 4@5¼c., as to grade and quantity.

Ammóniates, Potashes, Etc.

Trade has been rather quiet the past few days in the leading ammoniates. This arises more from the fact that stocks are light, rather than a slack demand. About all the spot sulphate of ammonia has been cleaned up at $3.40@3.50. June shipment is held at $3.20 and July-August at $3.15. Blood has been rather quiet, but held steady at $1.80 f. o. b. Chicago. Tankage is still in light stock and prices are nominal at $16@17 per ton f. o. b. Chicago for 9 and 20. Azotine is held at $1.90. Calcutta bone meal is selling for arrival at $25 per ton. Domestic steamed ground is in good request at $23.50@24.00 and raw at $26.00 per ton. Fish scrap is meeting with the usual demand at $19.00@20.00 for dry and $10.00@10.50 per ton f. o. b. factory for acid. Messrs. Thos. H. White & Co. in their letter say: "The ammoniate market is quiet and very firm. Stocks are light. We quote: Crushed tankage, 7 and 25 per cent., $14.50 per ton f. o. b. Chicago; 10 and 12 per cent., $16.50@17.00 per ton f. o. b. Chicago; 9½ and 15 per cent., $16.00@16.50 per ton, f. o. b. Chicago; 9 and 20 per cent., $16.00@16.50 per ton, f. o. b. Chicago. Concentrated tankage, $1.52½@1.55 per unit, f. o. b. Chicago. Hoofmeal, $1.50@1.55 per unit, f. o. b. Chicago. Ground blood, $1.85@1.87½ per unit, f. o. b. Chicago. Crushed tankage, $1.85@1.87½ and 10 c. a. f. Baltimore. Sulphate of ammonia, foreign and domestic, are quiet and unchanged. We quote $3.15@3.20, New York and Baltimore."

Petroleum Pipe Line Statements for May, 1899.

RECEIPTS.

The following table gives the receipts of each company from the wells during the months of May and April, 1899:—

	April.	May.
Elk Pipe Line	15,580.31	15,862.66
Emery Pipe Line	24,583.40	24,416.07
Eureka Pipe Line	1,071,899.36	1,168,562.73
Macksburg Pipe Line	384,749.57	403,360.83
National Transit	582,107.83	596,430.05
Prod. & Ref. Oil Co.	107,027.39	108,414.47
Southwest Pa. P. L.	294,429.77	315,740.49
Tidewater Pipe Co.	137,871.42	132,957.95
Totals	2,618,249.05	2,765,791.25

MONTHLY RECEIPTS.

The following is a comparative statement of the deliveries during each month in the years 1896, 1897, 1898 and 1899:—

	1896.	1897.	1898.	1899.
Jan.	2,676,193	2,670,605	2,745,712	2,420,071
Feb.	2,473,288	2,637,771	2,442,436	2,222,889
March.	2,676,264	2,911,172	2,814,029	2,649,528
April.	2,879,608	2,789,575	2,652,552	2,618,249
May.	2,839,602	2,852,124	2,681,118	2,765,791
June.	2,811,414	2,929,868	2,566,767	.....
July.	2,919,382	2,992,632	2,487,691	.....
Aug.	2,870,915	3,062,668	2,622,849	.....
Sept.	2,772,212	3,002,002	2,525,032	.....
Oct.	2,858,544	3,023,053	2,487,837	.....
Nov.	2,701,688	2,948,854	2,485,140	.....
Dec.	2,916,148	2,894,296	2,589,197	.....
Year.	33,445,571	34,724,700	31,100,360	.....
Avge.	2,787,964	2,893,725	2,591,697	2,535,306

DELIVERIES.

The following exhibits and deliveries from each line during the months of May and April, 1899:—

	April.	May.
Crescent Pipe Line	185,779.63	156,604.58
Emery Pipe Line	23,608.55	24,254.39
Eureka Pipe Line	33,178.73	52,816.42
Macksburg Pipe Line	47.47	16.74
National Transit	689,436.25	749,397.87
N. Y. Transit Co.	358,547.81	458,386.73
Prod. & Ref. Oil Co.	115,700.76	121,332.77
Southern Pipe Line	621,010.28	703,206.05
Southwest Pa. P. L.	16,187.47	22,058.70
Tidewater Pipe line	316,121.60	274,660.82
United States P. L.	17,867.92	15,843.94
Totals	2,377,486.47	2,578,579.01

MONTHLY SHIPMENTS.

The following is a comparative statement of the deliveries during each month in the years 1896, 1897, 1898 and 1899:—

	1896.	1897.	1898.	1899.
Jan.	2,532,004	2,533,263	2,903,813	2,475,510
Feb.	2,248,406	2,305,390	2,132,151	1,899,859
March.	2,436,008	2,772,133	2,625,124	2,635,445
April.	2,223,092	2,453,728	2,421,383	2,377,483
May.	2,418,434	2,546,693	2,392,839	2,578,579
June.	2,218,782	2,555,959	2,134,814	.....
July.	2,510,180	2,707,317	2,563,391	.....
Aug.	2,404,005	3,100,208	2,695,584	.....
Sept.	2,539,922	2,951,221	2,585,253	.....
Oct.	2,594,520	3,628,538	2,839,481	.....
Nov.	2,494,528	3,312,597	2,398,056	.....
Dec.	2,603,638	2,753,008	2,375,731	.....
Ttls.	29,284,210	33,621,058	30,367,611	.....
Avge.	2,440,351	2,801,755	2,530,634	2,393,376

NET STOCKS.

The following shows the stock held by each of the pipe line companies at the close of May and April, 1899:—

	April.	May.
Crescent Pipe Line	100,564.31	158,443.83
Elk Pipe Line	330.90	394.30
Emery Pipe Line	14,109.71	14,516.39
Eureka Pipe Line	1,998,976.68	1,781,096.84
Macksburg Pipe Line	610,417.25	647,104.41
National Transit	6,142,888.84	6,426,227.27
N. Y. Transit Co.	524,619.98	513,055.33
Prod. & Ref. Oil Co.	185,932.44	172,985.09
Southern Pipe Line	730,850.45	712,691.14
Southwest Pa. P. L.	1,422,840.85	1,540,188.60
Tidewater Pipe Co.	286,906.40	239,162.46
United States P. L.	29,006.63	29,008.47
Totals	12,047,444.44	12,234,674.15

TOTAL NET STOCKS.

The following table exhibits the stock of all pipe lines on hand at the close of each month in 1896, 1897, 1898 and 1899:—

	1896.	1897.	1898.	1899.
Jan.	5,329,560	8,709,992	10,636,318	11,485,579
Feb.	5,576,529	10,109,577	10,947,778	11,793,697
March.	5,841,722	10,221,050	11,142,281	11,806,881
April.	6,562,230	10,556,818	11,374,354	12,047,444
May.	6,983,422	10,863,052	11,663,837	12,234,674
June.	7,684,683	11,248,711	11,798,877	.....
July.	7,902,336	11,528,295	11,738,582	.....
Aug.	8,477,346	11,544,358	11,662,127	.....
Sept.	8,726,861	11,621,543	11,592,495	.....
Oct.	8,986,207	11,013,997	11,240,712	.....
Nov.	9,215,472	10,618,100	11,328,284	.....
Dec.	9,550,583	10,789,652	11,541,758	.....

OUTSTANDING CERTIFICATES.

The following table exhibits the amount of oil held by the National Transit Company, represented by outstanding certificates and other vouchers, at the close of each month in 1896, 1897, 1898 and 1899:—

	1896.	1897.	1898.	1899.
Jan.	290,000	166,000	1,208,990	1,905,000
Feb.	234,000	174,000	1,097,990	1,893,000
March	201,000	174,000	1,740,990	1,890,000
April	178,000	174,000	1,499,990	1,882,000
May	172,000	101,000	1,802,990	1,878,000
June	170,000	192,000	1,743,990	.....
July	161,000	187,000	1,624,990	.....
Aug.	159,000	208,579	1,514,990	.....
Sept.	162,000	283,788	1,589,990	.....
Oct.	158,090	371,059	1,849,989	.....
Nov.	162,000	476,488	1,924,990	.....
Dec.	165,000	879,990	1,971,000	.....

NATIONAL TRANSIT COMPANY.

Summary of report of the National Transit Company at the close of business, May 31, 1899:—

Gross stocks	7,186,800.05
Sediment and surplus	760,572.78
Acceptances, etc.	1,878,000.00
Credit balances	4,548,227.27
Total liabilities	6,426,227.27

RECEIPTS.

Runs from wells	596,430.05
Other receipts	977,087.26
Total receipts	1,573,517.31

SHIPMENTS.

Regular shipments	749,397.87
Delivered to other lines	540,781.01
Total deliverances	1,290,178.88

TIDEWATER PIPE COMPANY.

Summary of report of the Tidewater Pipe Line Company at the close of business, May 31, 1899:—

Gross stocks	546,558.81
Sediments and surplus	307,396.35
Acceptances	.....
Credit balances	239,162.46
Total liabilities	239,162.46

RECEIPTS.

Receipts from wells	132,957.95
Receipts from other lines	93,958.93
Total	226,916.88

SHIPMENTS.

Regular	274,660.82

Ohio Oils.

The following tables, giving statistics of Ohio and Indiana oil, are not included in the stocks and averages reported above:—

MONTHLY RECEIPTS.

The following table shows the receipts during each month in the years 1896, 1897, 1898 and 1899:—

	1896.	1897.	1898.	1899.
Jan.	1,739,291	1,547,658	1,457,122	1,430,375
Feb.	1,631,939	1,589,905	1,275,150	1,189,438
March.	1,795,745	1,733,521	1,476,996	1,497,886
April.	1,985,882	1,647,997	1,387,212	1,399,097
May.	1,945,979	1,685,011	1,406,450	1,499,500
June.	2,026,387	1,689,456	1,394,877	.....
July.	2,916,546	1,709,339	1,397,520	.....
Aug.	1,955,118	1,638,287	1,538,979	.....
Sept.	1,833,814	1,618,488	1,452,312	.....
Oct.	1,896,633	1,649,170	1,464,780	.....
Nov.	1,681,715	1,566,921	1,415,198	.....
Dec.	1,778,786	1,571,761	1,472,301	.....
Year.	23,311,853	19,547,514	17,128,897	.....
Avge.	1,942,655	1,628,059	1,427,408	1,403,259

MONTHLY SHIPMENTS.

The following is a comparative statement of the shipments during each month of 1896, 1897, 1898 and 1899:—

	1896.	1897.	1898.	1899.
Jan.	1,802,301	1,672,838	1,889,062	1,715,132
Feb.	1,593,323	1,795,876	1,944,249	1,604,794
March.	1,618,117	1,724,306	2,203,051	1,853,725
April.	1,546,888	1,585,187	2,058,630	1,797,810
May.	1,574,627	1,762,085	2,015,854	1,882,240
June.	1,667,914	1,750,613	1,975,584	.....
July.	1,617,519	1,841,908	1,967,098	.....
Aug.	1,745,657	1,478,129	2,223,750	.....
Sept.	1,702,721	1,655,593	2,032,483	.....
Oct.	1,704,005	1,591,419	2,186,912	.....
Nov.	1,720,720	1,353,321	2,054,504	.....
Dec.	1,727,549	1,881,121	1,851,234	.....
Year.	20,014,401	20,092,426	24,402,420	.....
Avge.	1,667,867	1,674,309	2,033,535	1,770,740

TOTAL NET STOCKS.

The following gives the amount of the stocks in Ohio oil at the close of each month in 1896, 1897, 1898 and 1899:—

	1896.	1897.	1898.	1899.
Jan.	21,431,778	23,174,324	22,280,840	14,896,134
Feb.	21,473,447	22,968,353	21,661,740	14,480,779
March.	21,651,075	22,977,567	20,885,685	14,126,046
April.	21,964,000	23,040,378	20,215,331	13,724,911
May.	22,385,420	22,968,301	19,605,927	13,339,158
June.	22,693,894	22,962,147	19,625,220	.....
July.	23,094,851	22,762,578	18,455,642	.....
Aug.	23,304,312	22,952,788	17,690,914	.....
Sept.	23,091,525	22,830,818	17,021,263	.....
Oct.	23,290,538	22,858,539	16,290,131	.....
Nov.	23,251,533	23,072,139	15,559,825	.....
Dec.	23,302,779	22,762,779	15,180,892	.....

BUCKEYE PIPE LINE COMPANY.

Summary of report of the Buckeye and Indiana Pipe Line Companies at the close of business May 31, 1899:—

Gross stocks	15,977,797.46
Sediment, etc.	2,638,639.88
Net stocks	13,339,157.58

FERGUSSON BROTHERS

Commission Merchants,

109 Chestnut Street, Philadelphia,

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CUTCH,
LEMON OIL.

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ARSENIC
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DOUBLE STAR CITRONELLA (IN ORIGINAL PACKAGES.)

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SUPER-CARB
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This Alkali contains 58 Per cent. of Alkali or nearly 99 per cent. of Carbonate of Soda. It is the most economical form of Soda for Manufacturers of Soap, Glass, Paper, Wood Pulp and Colors, and for Printers and Bleachers.

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SOLVAY PROCESS CO.
SYRACUSE, NEW YORK

TRADE B.M&Co. MARK

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Sole Agents for the United States **22 William St., New York**

WING & EVANS have appointed as exclusive Sale Agents

LINDER & MEYER, BOSTON, for New England States. who are prepared to contract for future delivery

LIABILITIES.

Outstanding acceptances, etc.	10,500,000.00
Credit balances	2,839,157.58
Total liabilities	13,339,157.58

RECEIPTS.

Runs from wells	1,499,500.80
Receipts from other lines	548,003.67
Total	2,047,504.17

SHIPMENTS.

Regular	1,882,240.09
To other lines	548,003.67
Total	2,430,243.76

Franklin Pipe Line Company.

The following table shows the runs during each month for the past five years of heavy oil in the Franklin district:—

MONTHLY RECEIPTS.

	1895.	1896.	1897.	1898.	1899.
January	2,202	3,058	1,597	3,447	2,756
February	2,467	3,442	3,208	2,982	4,203
March	3,892	3,057	5,038	4,832	5,841
April	4,882	3,961	4,148	4,789	4,197
May	3,981	3,607	3,480	4,096	6,264
June	5,031	3,685	3,310	4,223	....
July	4,229	4,046	4,994	4,715	....
August	3,674	3,178	3,364	4,437	....
September	4,878	3,079	3,484	3,807	....
October	3,650	3,573	3,410	4,275	....
November	3,744	3,628	3,942	3,541	....
December	3,746	2,989	3,302	5,317	....
Year	46,112	41,253	43,277	50,461	....
Average	2,843	3,438	3,606	4,205	4,652

MONTHLY SHIPMENTS.

In the following table are given the monthly shipments from Jan. 1, 1895, to date:—

	1895.	1896.	1897.	1898.	1899.
January	5,638	10,912	5,238	5,364	9,037
February	7,599	4,014	6,098	1,273	5,724
March	3,601	2,898	587	2,720	9
April	2,146	4,422	290	722	1,636
May	....	168	....	1,001	725
June	1,228	289	202	434	....
July	516	144	....	434	....
August	1,732	292	1	434	....
September	1,850	3,041	4,816	....	....
October	5,711	1,975	9,761	7,606	....
November	8,760	7,512	7,795	10,070	....
December	9,027	10,424	8,795	8,246	....
Year	47,898	46,091	43,277	38,304	....
Average	3,991	1,841	3,603	3,196	3,426

The following net stocks at the end of each month since Jan. 1, 1895, were as follows:—

	1895.	1896.	1897.	1898.	1899.
January	25,912	20,697	10,081	11,810	19,606
February	20,789	20,126	7,192	13,526	18,685
March	22,890	20,290	11,563	15,638	23,918
April	25,717	10,860	15,511	19,704	26,479
May	20,638	23,280	18,992	22,809	32,019
June	33,521	26,267	22,000	26,588	....
July	37,215	30,529	27,093	30,869	....
August	39,157	33,415	30,455	34,871	....
September	42,170	33,453	29,123	38,677	....
October	40,121	25,051	22,769	35,346	....
November	34,104	21,167	19,225	28,817	....
December	28,554	13,722	12,733	25,888	....

(Special Correspondence to the Reporter.)

Products of the Philippines.

Washington, June 16, 1899.

Chief Hitchcock of the section of Foreign Markets of the Department of Agriculture, has prepared a brief bulletin on the plant products of the Philippine Islands, which contains some notes of interest to the Reporter's readers concerning the production of indigo, oil seeds, spices, medicinal plants, etc. Mr. Hitchcock says:

"Years ago indigo was one of the important products of the islands. In quality the Philippine article compared favorably with the best grade of Guatemalan product. It used to bring from 80 to 85 pesos per quintal (61 to 65 cents per pound), but in 1875 the price fell to 30 pesos per quintal (23 cents per pound). At present it fluctuates between 40 and 45 pesos per quintal (30 and 35 cents per pound).

"The decline in prices was brought about by a deterioration in quality that resulted in a greatly lessened demand. The cause of this deterioration in quality is easily explained. Years ago the native grower knew and practiced only the most primitive methods of preparing indigo; but with the arrival of large numbers of Chinese in the Philippines he gradually abandoned the original processes and began to imitate the Chinese practice of adulteration. It was found that by the admixture of a small quantity of lime with the indigo the coloring matter could be precipitated and the product prepared for the market in a much shorter period. While the more rapid process proved a source of temporary profit the effect upon the quality of indigo was soon discovered by the purchaser and the Philippine product, owing to the extensive use of lime, fell into discredit in foreign markets. If the practice of intermixing lime should be abandoned and a pure grade of indigo again produced, higher prices would, undoubtedly, be restored.

"Indigo is produced in the provinces of Bulacan, Neuve-Ecija, North Ilocos, South Ilocos, Pangasinan, La Lagune, Batangas, Tayabas, Capiz, Bohol, also in several other provinces. The best kind is said to grow in the vicinity of Bayambang in the province of Pangasinan. Most of the indigo exported from the islands goes to China; shipments are also sent to Europe and to the United States.

"Other Philippine dye plants that should be mentioned are the sibucao, or sapan wood; the biri, or safflower; the achuete, used as a substitute for saffron, and the quilite, furnishing a red color.

"Oleiferous plants occur in considerable numbers. Besides the cocoa-palm, there are the meni, or peanut, the lumbeng, or candle-nut; the ajonjoli, or sesame; the tangan-tangan, or castor bean, and the bayang-cambing. The oil from the last mentioned does not become rancid and is, therefore, employed in perfumery for the preservation of essences.

"There are several species of cocoa palms growing in the archipelago, but the ordinary cocoa tree (cocos nucifera) is the most important. The Indians make use of it in a great many ways, but only the principal one needs to be enumerated. The kernel of the nut they use for food, while the liquid the shell contains makes a refreshing drink. If allowed to stand for some time this liquid forms a very agreeable milky juice that is relished not only by the natives, but by Europeans as well.

"The veins and smaller ribs of the leaves are used to make brooms, the midribs serve as fuel, and the ashes are utilized in making soap. Oil barrels, tube casks and water pipes are fashioned from hollow sections of the trunk. From the roots the natives extract a red dyeing material that they chew in place of the Areca palm nuts or bonga when the latter cannot be procured.

"Large quantities of cocoanut oil are manufactured in the Philippines. This oil is much prized by the natives. The men and the women both use it to anoint the thick growth of hair that adorns their heads, and it thus finds a ready sale at remunerative prices. It is also used in the lamps that take the place of gas burners on the streets and in those used by the natives and Chinese in their houses.

"Manila exports annually about 150,000 pesos ($120,000) worth of cocoanuts to China and British India, and about 30,000 pesos ($23,000) worth of cocoanut oil to China.

"Of spices, the Philippines furnish cinnamon, nutmegs, pepper, ginger and marjoram.

"Medicinal plants are abundant, but most of them are little known. Among the most familiar are the papaw, which has already been mentioned among the fruits. Several kinds of ipecacuanha occur, and also the dita (Alstonia scholaris), a kind of cinchona, from the bark of which ditaine is obtained, and the parsonia, whose stems boiled in cocoanut oil form a balsam used for healing wounds.

"Aromatic plants are not wanting in the Philippine Islands, but as they grow wild in such profusion no care is bestowed upon them. Among such plants may be mentioned magnolias, camellias, clematis, several kinds of roses, dahlias, the ylang-ylang, from which a sweet perfume oil is extracted; the papua, the jessamine, and many other species of ferns and orchids."

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Solution Chloride Iron
Chemically Pure Acids, Etc.

DYE MARKET.

NOTE—Our prices are for large lots except when otherwise specified, and buyers of small quantities must expect to pay an advance on these figures. The prices current will be found on page 37.

Saturday Evening, June 17, 1899.

Business on the whole continues good; prices show few changes and rule from steady to firm, and few new features have put in an appearance. Buying is principally in a hand-to-mouth manner, and speculation, even in an article like gambier, is dead. There is a good seasonable demand for the dyewood extracts, and the starches and dextrines are also active. Nutgalls, both blue Aleppo and Chinese are in very limited supply, and quotations are firm in consequence. Yellow prussiate of potash has an advancing tendency, and the products of tin remain firm at the recent advance.

ALBUMEN.—The demand for egg is limited to consumers' immediate requirements, as indications are that new crop goods will rule lower than the present quotations. Dealers, however, are keeping prices well up, and we hear of no sales of prime goods under 65c., although inferior grades are offered as low as 55c. There is a good demand for blood, and prices remain unchanged and steady at 16c. for imported, and 15@15½c. for domestic, as to seller. The foreign market for egg is quiet, and values are inclined to be easier.

ANILINE OIL.—No new features have put in an appearance. Demand is of a jobbing character, and stocks are ample, but prices remain fairly steady because of a reported good demand in European markets. We quote 9@10c., as to quantity.

ANILINE SALT.—The supply of aniline salt in this market is about equal to a year's consumption. The demand is in no way speculative, and is limited to the immediate wants of consumers. Prices vary as to seller, but 7⅜@9c. is generally quoted as to quantity.

CUTCH.—The demand is of ordinary proportions, and no large sales have been heard of for some time. The higher grades are in the shorter supply, and prices are firm. The lower grades are more abundant, but the shipments to London have created a much firmer feeling than prevailed some time ago. We quote: Bale, 4@5c.; ordinary, in boxes, 4½@7c.; fine, in boxes, 7½@9c.

DEXTRINE.—Manufacturers of corn dextrine report an active demand, which has caused them to get behind in their deliveries. Grain retains its strong position, and quotations for dextrine are consequently firm. We quote 2½@3c. The demand for potato dextrine is gradually exhausting the supply and prices have an advancing tendency. We quote 5½@6c., as to quantity. Stocks of imported dextrine are only moderate, but there is no difficulty in obtaining supplies abroad. Demand is good and prices are steady at 5⅞@6c.

DIVI DIVI.—With the exception of 25 bags, the large arrivals of the past several weeks have all been bought up, a large portion going to consumers. There has been a good jobbing demand from store, and prices are held firm at $42@45, as to quantity and quality.

FUSTIC.—Demand is good, and prices are steady at the range of $11@$18, as to quantity and quality. Our Trieste letter, dated June 3, says: "Good staves are quoted 5s. 8d. and roots 5s. in bulk, cost and freight New York, or 4d. more in bags, gross for net."

GAMBIER.—The market continues inactive, and speculators and consumers alike exhibit no interest in the situation. Spot prices range 2.85@3c. This is for store goods, as there are no steamers or sailers discharging at the present time. The sailer Isaac Reed has not yet arrived, but she is expected every day. Goods on this vessel can be bought at 2.82½@2.87½c. Gambier on vessels due in July, August and September can be bought at 2.82½@2.85c. Sail shipment is offered at 2.77½@2.80c., and steamer shipment at 2.70@2.75c. Singapore remains a trifle higher than New York, and sail shipment is quoted at 2.80c. and steamer shipment at 2.75c. Consequently no business is done with Singapore. During the first half of June the shipments from Singapore to the United States have amounted to 550 tons by sailer and 50 tons by steamer. The sales during the past week have been very small. The spot business has amounted to 400 or 500 bales, and sales of future arrivals have not been over 200 tons all told in all positions. Cube gambier continues in fair demand, and 4½c. is now lowest for No. 1, while 4¾@5c. is generally asked. No. 2 cube is firm at 3¾@4c. There is no cube gambier on the Isaac Reed, and very little on the other vessels on the way. Singapore remains firm at 4½@5c. for first quality, and this has a tendency to discourage shipments.

INDIGO.—There is a good consuming demand for all grades of indigo, which is gradually reducing stocks at all points to a greater extent than was anticipated. The stock of all grades at London on May 31 last amounted to 13,331 cases, as compared to 18,081 cases at the same time in 1898, and 22,186 cases at the same time in 1897. Prices are firm and tending upward. We repeat our previous quotations as to grade and quantity: Bengal, low grade, 62½@67½c.; medium, 70@82½c.; high grade, 85c.@$1.25; Kurpahs, medium to good, 55@65c.; higher grades, 67½@82½c.; "J" (synthetic), 38c.

MADDER.—Our Smyrna letter, dated May 27, says: "Market rather quiet, stock 23 tons, quotations, 86s. per cwt. f. o. b. Smyrna." The New York market is quiet and prices steady.

NUTGALLS.—There is no change in the situation, and supplies of both blue Aleppo and Chinese are still limited. Demand is equal to the supply, and prices remain very firm at 15½@16c. and 15@15½c. respectively. Our Smyrna correspondent writes under date of May 27: "Stocks amount to only about 56,000 lbs. blue and 33,000 lbs. green and white. Quotations: Blue, 58s. 6d.; green and white, 52s. 9d. per cwt. f. o. b. Smyrna, in bags actual tare."

PERSIAN BERRIES.—The supply in this market is limited, but is fully equal to the demand; prices remain steady. Our Smyrna letter, dated May 27, says: "Market steady, with small stock, amounting to 250 bags, of low quality principally. Quotations: 16s.@20s. 6d. per cwt. f. o. b. Smyrna."

PRUSSIATES OF POTASH. — No change has occurred in the situation. Offerings of yellow are small, and holders are firm in asking 19@19½c., as to quantity. Red is quiet, but quotations remain firm at 37@40c.

STARCH.—There is an active demand for all starches and this, together with the firm position of the grain market, keeps prices firm. Manufacturers are behind in their shipments of corn starch, and prices are tending upward. We quote, as to quantity and seller: Pearl, in barrels, in carload lots, 1.47@1.60c., and in bags, 1.42@1.55c.; powdered, in barrels, 1.57@1.65c.; and in bags, 1.52@1.60c. Supplies of potato starch are being gradually exhausted by the good demand, and holders are firm in asking 4½@4¾c. Wheat starch is moving freely, and prices range 5@6c., as to quantity and quality.

SUMAC.—The market continus inactive, there are no sales for shipment and demand for spot goods is light. Consumers are fairly well supplied, many reporting that they have stocks large enough to carry them through the fall months. A majority of the letters from Sicily report an advancing market, because of light supplies and in anticipation of a well-controlled market after Aug. 1, when the combination expects to become effective. The imports continue heavy and, while some of it goes to consumers, a large portion comes on consignment with the hope that it will find a market. Spot quotations range $51@55 for first quality and $48@52.50 for second quality, as to quantity. Shipments are quoted $52@56 for No. 1, and $50@52.50 for No. 2, as to brand and quantity. Our Trieste correspondent writes, under date of June 3: "Sumac is dull and no business doing; we quote first quality at $42.50 and second quality at $36.50 per ton, cost and freight New York. Approximate counter offers would probably buy."

TIN CRYSTALS.—Demand continues good, and prices are very firm at 20@21½c., as to style of package.

Chlorates of Potash and Soda

Swedish Electrical Make and Finest Powder

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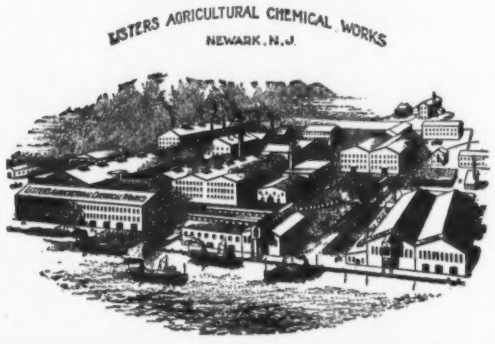

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ACETIC ACID,	BISULPHATE OF SODA,	CHLORIDE OF ALUMINA,
TIN CRYSTALS,	BISULPHITE OF SODA,	EXTRACT OF INDIGO,
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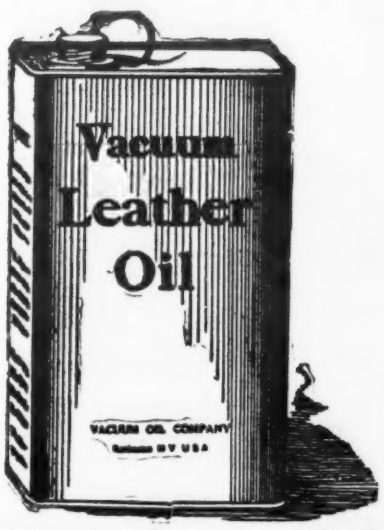

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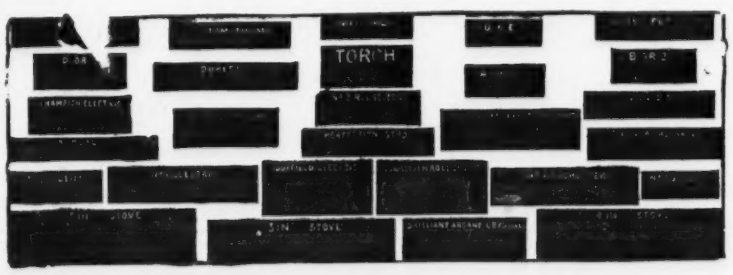

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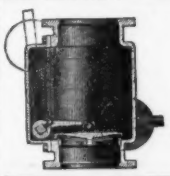

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